A. UI/QC Program Improvement Study Final Reports

CH-029 - Quality Improvement Program Final Report: Earnings Verification, January 1990 (Colorado Department of Labor and Employment).

CH-030 - Quality Improvement Program Final Report: Misreported Earnings Profile, January 1990 (Colorado Department of Labor and Employment).

CH-031 - Quality Improvement Program Final Report: Work Search Verification (#2), February 1990 (Colorado Department of Labor and Employment).

CH-032 - Quality Improvement Program Final Report: Work Search Workshop Evaluation, February 1990 (Colorado Department of Labor and Employment).

CH-033 - Quality Improvement Program Final Report: Unreported Earnings Profile, April 1990 (Colorado Department of Labor and Employment).

CH-034 - Quality Improvement Program Final Report: Work Search Profile Utilization and Error Prevention (Colorado Department of Labor and Employment).

CH-035 - Quality Improvement Program Final Report: Misreported Base Period Wages - Information Campaign, July 1990 (Colorado Department of Labor and Employment).

CH-036 - UI/QC Program Improvement Study Final Report: ES/UI Link Study, June 1990 (Utah Department of Employment Security).

CH-039 - Quality Improvement Program Final Report: Misreported Base Period Wages - Form Revision, August 1990 (Colorado Department of Labor and Employment).

B. Quality Improvement Program (QIP) Study Summaries -

CH-037 - UI Program Improvement Summary - An executive summary of a QIP study report: Temporary Total Disability (TTD) Claims, May 1990 (Washington Employment Security Department).

CH-038 - UI Program Improvement Summary - An executive summary of a QIP study report of Pension Claims, May 1990 (Washington Employment Security Department).

CH-029

COLORADO

QUALITY IMPROVEMENT PROGRAM

- EARNINGS VERIFICATION -

FINAL REPORT

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January 1990

Executive Summary

The earnings verification study generated significant results in terms of error detection. The group subject to verification had a case error rate of 70.05%, more than ten times the case error rate of the control group. Of the 828 weeks investigated for the test group, 301 were determined to be improper due to misreported earnings. A further breakdown of these improper payments reveals that 210 weeks were overpaid by a total of $9,288 and 91 weeks were underpaid by a total of $2,926. These 301 improperly paid weeks involved 145 separate claimants. Some duplication with crossmatch was found but this could, by design, be minimized and both efforts integrated into a more comprehensive approach. Specific procedural recommendations are presented elsewhere in the report. Overall, the Q.I.P. study was quite successful and results exceeded even the best of expectations.

Colorado's Quality Control (QC) unit implemented a Quality Improvement Program (QIP) in January, 1989. This year-long program is composed of ten separate studies. One of these studies examines and tests an earnings verification procedure. This report details and summarizes results obtained from this QIP study.

By way of background, a review of QC investigation results revealed that "earnings errors" are a major cause of improper payments. An earnings error occurs when a U.I. claimant either misreports his earnings or, much less frequently in Colorado, fails to report earnings altogether. Under Colorado law, claimants may receive U.I. benefits if they work less than 32 hours and earn less than their weekly benefit amount (WBA) during the week. Claimants may earn up to 25% of their WBA without affecting their U.I. benefit payment, but anything in excess of 25% is deducted dollar for dollar. QC results indicated that claimants frequently misreport their weekly earnings which, in turn, causes over and under payments. This gave rise to two questions; how to prevent these improper payments and how to detect the improper payments which continue to occur. This QIP study addressed the latter question - detection of improper payments caused by misreported earnings (although a current earnings verification could be used to prevent errors as well).

The primary system control for detecting earnings errors is "crossmatch", which is particularly good at detecting unreported earnings. Its usefulness in terms of misreported earnings is more limited. Crossmatch tends to catch the larger overpayment amounts, partially because of the formula used to determine which claimants are selected for the earnings verification. Crossmatch also balances over and under payment amounts on each case selected for audit. Many of these cases will have a "net" overpayment of $50 or less for the quarter reviewed, so no further action is necessary. Crossmatch is also, of necessity, "dated" in that it verifies earnings from prior quarters.

A type of secondary control exists with claimants, as it is their responsibility to properly report earnings. Some claimants will notify their local office that they misreported earnings, but this appears to be the exception rather than the rule. Thus, our preliminary analysis of existing system controls evidences a potential need for some form of additional monitoring or supplemental system control. By way of resolution, QC staff suggested that the Department test a more current verification procedure via a QIP study. The study would address several pertinent questions. For example: What is the nature and extent of misreported earnings errors? Will a more current earnings verification detect misreporting errors which crossmatch might miss? Would this verification procedure be redundant by duplicating crossmatch efforts? What is the best way to utilize such a verification procedure? A description of the study design follows.

The first step was to generate an appropriate sample of U.I. claimants for the study. The population from which the sample was drawn was composed of all non-interstate claimants that reported earnings in the prior week and received a partial U.I. payment. QIP staff obtained a data extract from the master database on the mainframe computer. The sample was divided into equivalent, randomly selected test and control groups. It was determined that a minimum of 200 claimants per group would be necessary. The groups were deliberately oversampled as we knew beforehand that some claimants (e.g., interstate and pension claimants) would be dropped from each group. After eliminating these individuals there were 234 claimants in the control group and 231 in the test group.

The control group was set aside and allowed to go through the normal claims processes while the test group was subject to the new earnings verification procedure. Some minor modifications were made to the earnings verification form used by crossmatch for purposes of this QIP study. The revised form covered a four week time period - the two weeks on the targeted payorder, plus the week before and after.

Claimants are required to report the number of hours worked, gross pay and the employer's name/address on their payorder. The earnings verification was sent to these employers and a purge date established. If a verification was returned as undeliverable, QIP staff contacted the claimant via phone to obtain a better address. Employers that failed to respond were sent a second verification. If the employer failed to respond to the second request, QIP staff attempted to contact them by phone to verify the earnings.

These steps were taken in order to minimize non-response effects and ensure that the final test group numbers would remain at or above 200. These various efforts proved to be worthwhile and quite successful, with complete verifications obtained on 207 of the 231 test group members. A number of unique situations or difficulties were involved with the claimants dropped at this stage. One claimant was self-employed, doing odd jobs for cash, while another had meant to report vacation pay. Ten claimants reported earnings from <u>two</u> employers. An earnings verification was sent to both, but for various reasons, only one of the two could be verified. There were two cases where the employer could not provide a weekly breakdown and the gross earnings included hours/days outside the targeted weeks. There were two claimants that reported salary <u>and</u> tips, but the employer response included the salary only (and further verification attempts were unsuccessful). Finally, there were eight cases which were simply not verifiable (i.e., no address, no response, no phone number, claimant and/or employer couldn't be contacted, etc.). Nonetheless, the study had an excellent verification rate of 89.61%.

The verification procedure was highly successful, detecting numerous misreported earnings errors in the test group. For comparison purposes the same four week time frame (per claimant) was identified

and reviewed for the control group. All targeted weeks fell in the first quarter of 1989. The study design allowed sufficient time to elapse for crossmatch to be completed, thereby ensuring that every possible system control operated before the final results were tabulated. Sample data for each group is presented in Table 1.

TABLE 1
SAMPLE DATA

	Number of Claimants	Weeks Sampled	Dollars Sampled
TEST	207	828	$89,678.00
CONTROL	234	936	$97,487.00

Significant results were obtained for the test group, demonstrating that the earnings verification procedure was productive. The results are meaningful in terms of weeks, dollars and case errors (i.e., number of claimants with a misreported earnings error). Overall study results are detailed in Table 2 below.

TABLE 2
OVERALL RESULTS

	WEEKS		DOLLARS		CLAIMANTS	
	Proper	Improper	Proper	Improper *	Proper	Improper
TEST	527	301	$80,390	$12,214	62	145
CONTROL	912	24	$96,143	$ 1,751	219	15

*NOTE: Improper dollars include over and under payments. Proper plus improper will therefore exceed sample dollars.

A cursory review of these figures reveals significant differences between the two groups. In terms of claimants, 70.05% of the test group had an earnings error compared to only 6.41% of the control group. In terms of dollars, 98.62% were proper for the control group compared to 89.64% for the test group. The control group numbers represent what current (normal) system controls detected. It is obvious that a meaningful difference exists between the error rates for the two groups. Since a primary purpose of the study is to compare detection rates, the question is whether these differences are statistically significant or merely due to "chance".

The customary statistical procedure is to perform a "z test" using a standard formula which tests for a significant difference between two proportions. A z test was run on the case error rate (i.e., the proportion of cases with errors for each group) and on the weekly error rate (i.e., the proportion of weeks in error for each group). The results of these two tests were statistically significant at the 99% level (alpha=.01). This indicates that the study results are not due to chance. All other things being equal, the results must be attributed to the verification procedure. In short, the QIP earnings verification generated significantly better results, for the time period examined, than current procedures. Table 3 below provides a futher breakdown of the improper payments.

TABLE 3
IMPROPER PAYMENTS BY TYPE

	WEEKS		DOLLARS	
	Over	Under	Over	Under
TEST	210	91	$9,288	$2,926
CONTROL	18	8	$1,344	$ 407

It is evident that the QIP verification procedure was, for the time period covered, more effective at detecting improper payments than current processes. The total overpayment amount detected for the test group represents 10.36% of that group's sampled dollars, whereas the same figure for the control group is only 1.38%. Similar results exist in terms of sampled weeks. For the test group, 25.36% of the weeks sampled were overpaid and 10.99% were underpaid. In contrast, the control group figures are 1.92% overpaid and 0.85% underpaid. The average overpayment amount was $44.23 for the test group and $74.67 for the control group. These latter figures support our earlier premise that current agency processes tend to detect errors involving larger overpayment amounts.

Several other items of interest were investigated. The issue of reporting net instead of gross pay was examined. Using percentage of verified earnings as the criteria it was found that: 36 claimants, 45 weeks and 24.83% of improper cases were within 5 - 10% and 7 claimants, 8 weeks and 4.83% of improper cases were within 11 - 15%. Another interesting item uncovered was that 25 claimants, 26 weeks and 17.24% of improper cases were misreported the first week but the claimant compensated for the error the following week (within $10). It was also found that 24 claimants, 38 weeks and 16.55% of improper cases had reported earnings just under the WBA before the verification but were OBA (over benefit amount) afterwards. A final item of interest regards claimants that report just under the "25% allowance" (i.e., a claimant may earn up to 25% of WBA without affecting the U.I. payment, but anything in excess is deducted

dollar for dollar). There were 19 claimants, 26 weeks and 13.1% of improper cases under the 25% limit before verification which were over the limit after verification.

The QIP study verified earnings for four weeks per claimant. Two of the weeks were targeted during sample selection (as Colorado uses a biweekly payorder card). The week immediately before and after the two target weeks were also included in the verification. One of the secondary questions the study addressed was whether the verification should be limited to the two target weeks ("key weeks") or expanded to include additional weeks ("non-key weeks"). By adding the non-key weeks, QIP staff could compare test group detection rates (weeks and dollars) for the two types of weeks. If an equivalent number of weeks and/or dollars are detected for both types, a four week verification may be more appropriate than a two week verification. Table 4 presents a breakdown of these test group results.

TABLE 4
BREAKDOWN OF IMPROPER PAYMENTS
- TEST GROUP -

	OVERPAYMENTS		UNDERPAYMENTS	
	Weeks	Dollars	Weeks	Dollars
KEY WEEK	115	$5,688	59	$1,709
NON-KEY WEEK	95	$3,600	32	$1,217

The results for the key weeks are somewhat better than those for non-key weeks. This is particularly true for the amount of overpaid dollars and the number of underpaid weeks. The average key week overpayment was $49.46. This is $11.57 higher than the non-key week average of $37.89. In contrast, the average key week underpayment was $28.97 while the non-key week average was $38.03. Overall study results reveal that more improper payments were detected for the two target weeks than for the two added weeks. Dollar figures were also higher for the key weeks. However, verification was successful for the non-key weeks too. In terms of weeks investigated, 42.03% of the key weeks involved an improper payment compared to 30.68% of non-key weeks. These various results suggest that limiting the verification to the two key weeks is probably more efficient and cost-effective than including the additional weeks. Another consideration is the extra time and effort required. In some cases another employer was (or could be) involved on these additional weeks. This, in turn, necessitates further staff research (i.e. locating the payorders, tracking the additional employers, sending verifications, etc.). It thus appears that the easiest, most productive approach is to target only the two key weeks for verification.

A primary concern here was duplication of effort with the crossmatch program. It was found that 103 of the 207 claimants were also selected by crossmatch. Of these 103, six had an earnings-caused overpayment established, but only four were a result of the crossmatch program. The other claimants selected by crossmatch had a "net" overpayment of less than $50, thereby precluding further action by crossmatch (as it is simply not cost-effective for them to pursue overpayments below this threshold).

A breakdown of the 104 cases not selected by crossmatch should prove interesting. After "netting" out the underpayments, 40 cases were "proper" and 17 were underpaid. There were 21 cases overpaid by $25 or less, 12 cases overpaid between $26 and $50, 5 cases were over by $51 to $75, 3 were over by $76 to $100 and 6 cases were overpaid by $101 or more. These figures make it evident that a supplemental earnings verification could be a useful addition to current agency processes. The advantage for crossmatch is that it reviews earnings for an entire quarter and, in a few cases, two quarters. The process is, by design, somewhat "dated". Claims are frequently exhausted or inactive by the time crossmatch is complete. This limits use of corrective action strategies aimed at error prevention.

It should be noted that some duplication of effort occurred. However, QIP study results must be considered as positive. At the time of verification a highly significant number of claimants had an improper payment. A statistically significant number of weeks and dollars were involved as well. A current verification would establish over or under payments for the week(s) in error at the time of detection, long before the quarter ends or crossmatch begins. Preventative measures could then be introduced to reduce the potential for future misreporting errors. Both types of verification complement one another, as they serve different purposes. Specific procedural recommendations are presented below.

Recommendations

The QC unit recommends that the Department evaluate the benefits and detriments of a more current earnings verification procedure. The idea is worthy of further examination and consideration. The verification could be modeled after the QIP study, with claimants selected each week for verification. Claimant rebuttal would be obtained by phone or mail when necessary. A two week verification would probably be the most productive approach.

The above procedure functions primarily as a method of error detection. Its value in terms of error prevention is more limited but, with time, claimants will learn through the "grapevine" about the verification and this should enhance these preventative effects. However, the earnings verification procedure could be utilized to educate claimants and thereby prevent at least some errors from occurring. This would maximize the procedures value as a method of error prevention without affecting error detection.

There are several ways to utilize the earnings verification procedure for error prevention. For example, when an earnings error is detected by verification the claimant could be contacted by telephone. The claimant could then be subject to an intensive orientation or "educational session" regarding proper reporting of earnings. The verified earnings information could already be entered into the CUBS system and, at managements discretion, an over/under payment established. The instructional session could take the form; "this is what you did wrong, this is why, this is the effect of the error, and this is how to avoid the problem in the future." Claimants that continue to underreport will be caught by crossmatch later (as they should be), but others will correct their mistakes and properly report their earnings. The verification thus serves as a "selection criteria" for an educational service aimed at error prevention. In lieu of a call, an informational "package" could be developed and mailed to these claimants when an error is detected. The package would stress correct reporting techniques and encourage claimants to take responsibility for properly reporting earnings. At the very least a message could be included with the next payorder warning the claimant about the problem or suggesting they call or visit the JSC for clarification or instruction.

Conclusion

The QIP study was successful and productive. A statistically significant number of improper payments were detected by the earnings verification study. A case error rate of over seventy percent for the test group suggests that misreported earnings is an error cause of considerable consequence. Integrating a current earnings verification procedure into normal agency processes could prove quite beneficial. Such a procedure could supplement and complement the crossmatch system. A current, ongoing verification would function primarily as a method of error detection. However, its utilization could include the educational approach detailed above and thereby have a greater "preventative" value as well. Strong emphasis could be placed on this preventative approach. By educating claimants at the time errors are detected the Department could prevent further errors from occurring with little duplication of effort. In short, a current earnings verification is an idea worth adminstrative review and consideration.

CH-030

COLORADO

QUALITY IMPROVEMENT PROGRAM

- FINAL REPORT -

MISREPORTED EARNINGS PROFILE

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Executive Summary

This study was an attempt to develop a claimant profile for misreported earnings. A successful profile could be utilized to prevent or detect misreported earnings errors. A profile was, in fact, developed through this Q.I.P. effort. It is composed of five "key" characteristics: not ES registered, WBA ($50-$149), last separation was not lack of work, 6-10 full weeks paid and a DOT code of structural work. The profile was tested on a different quarter (1/89) than the ones the profile was based upon. The test results were successful, but only moderately so. The profile does have predictive value, but this value is too low for practical application or utilization. It is suggested that the misreported earnings profile be re-examined in the future since new data may well generate better results. The profiling effort was, for the most part, a successful endeavor.

Introduction

Colorado's Quality Control (Q.C.) unit initiated the Quality Improvement Program (Q.I.P.) in January, 1989. This year long program is composed of ten separate program improvement studies. All ten studies examine or involve one of the three major error causes (i.e., base period wages, benefit year earnings and work search). One of these studies was an effort to develop a claimant profile for misreported earnings. A profile is comprised of a specific group of claimant characteristics which, in conjunction with one another, are peculiar to the group which is prone to error. A successful profile has a certain degree of "predictive value", as the existence of certain combinations of profile characteristics identifies (or suggests) which claimants have a tendency to make misreported earnings errors. This report outlines and summarizes both the developmental process and the study results.

Process and Results

An analysis of Q.C. investigation results for the last three years revealed that earnings errors are a significant cause of improper payments. In fact, earnings errors are second only to work search in terms improper payments with at least partial claimant responsibility. Two types of earnings errors exist: misreported earnings and unreported earnings. The former is the focus of this Q.I.P. report while the latter was the focus of a separate Q.I.P. study.

The Departments' primary system control for misreported earnings is the crossmatch program. The crossmatch process is particularly effective at detecting unreported earnings errors, but misreporting errors are also detected (albeit with a lower frequency). Nonetheless misreporting errors will, for various reasons, remain undetected. It should be noted that crossmatch has only minimal value in terms of error prevention since it is, by design, an error detection methodology. A dated timeframe is necessairly inherent to the crossmatch process, so the detected errors tend to involve multiple weeks and substantial overpayment amounts. Secondary system controls exist with the local office as well as with the claimant. The question is whether another system control could be developed for misreported earnings. It could be used for error prevention, error detection or to supplement current system controls. The Q.C. unit proposed the development of a claimant profile for misreported earnings, as it could be used to prevent or detect errors while complementing existing processes.

The fundemental idea is to identify several specific, "key" characteristics of the error-prone group. A profile (or "model") refers to this set of identified characteristics. Although many individuals in the claimant population will possess some of these characteristics they should, as a whole, be more predominant in the error-prone group. If this holds true, the existence of these characteristics would be a good indicator of "error potential". The only risk is by way of negative results, as "key characteristics" may not exist for this particular error cause/group. A cautious approach was maintained throughout so that the best characteristics could be identified with a certain measure of statistical reliability.

A number of inter-related questions must be addressed before the study could proceed. Should the profile be based on Q.C. data (which is essentially a randomly selected sample) or population data? How should this data be organized or formatted? What distinguishes the misreported earnings group from the non-error group? What constitutes the "claimant population" and what timeframe is appropriate for this study? Which characteristics should be included/excluded? How are the "key" characteristics identified?

It was decided that the profile should be based on population data from the mainframe. The Q.C. data is sufficient for most purposes, but the number of misreported earnings errors is probably inadequate to develop a statistically valid profile. Using population data allows for consideration of the entire claimant population. This also eliminates any possibility of sampling error or other potential biases. It was determined that the error group should be composed of all claimants that had made an earnings error regardless of how the error was detected.

The claimant population for calendar year 1988 was used to develop the profile. This provided a suitable timeframe and sufficiently large numbers. The necessary data was not generated until crossmatch was completed on all four quarters. Using a full calendar year's data should also eliminate seasonal effects which could bias a sample or affect data from a shorter timeframe. Interstate claimants were excluded from the population.

The data extract was organized into a series of crosstabulations. These "crosstabs" included virtually every characteristic available on the mainframe database. Some of these variables were broken-down in two or more ways. For example, the claimant's DOT code was examined for the first digit only, the first two digits and the first three digits. A number of additional crosstabs, relating one characteristic with another, were generated and reviewed. This served as a crosscheck of information, a verification of analytical determinations and a way to uncover the inter-relationship of variables. Every crosstab included the frequencies, percentages (column, row and overall), chi-square statistic and associated probability. A few characteristics (sex, age and ethnic) were excluded from consideration as possible profile variables due to their sensitive nature.

The initial focus involved analysis of frequencies and percentages. For each value of a given characteristic a certain number and percent will exist in the error and non-error group. The basic idea is to identify the values which are higher for the error group compared to the non-error group. Unusually high percentages indicate that the particular value of that variable may be more unique to the error group than the non-error group. Then one must determine whether this observed difference is statistically significant or merely due to random distribution.

To determine the significance of a given frequency/percentage the chi-square statistic and associated probability are reviewed. The chi-square value and probability indicate whether the crosstab results are due to chance or can be attributed to some unique interrelationship between the two variables (i.e. the error/non-error groups and the particular characteristic). If the overall chi-square appears significant the individual cell(s) contribution to this value is computed. A "cell" refers to a specific value of a characteristic for a given group. If the crosstab itself is significant a number of cells will also be significant. Hence this part of the analysis identified and reviewed the potentially significant cells for the error group.

A list of potential, "key characteristics" resulted from this comprehensive analysis. Since the list was fairly extensive and a profile should be comprised of four to six variables, the next step involved eliminating inappropriate characteristics. Those characteristics which are retained should have the highest frequency/percentage in the error group, compared to the non-error group. They should also make the greatest contribution to the chi-square statistic. The original list of potentially significant characteristics had 83 separate values identified for 29 variables. Further examination and analysis reduced this initial list to 11 values for 10 different characteristics. Unfortunately some of these 10 variables were highly correlated with one another. A profile should not contain highly correlated variables because they have essentially the same "predictive value". However, it was determined that five or six characteristics which were not highly correlated with one another could be obtained from the list. At this point the "best" values/characteristics must be identified.

Based on careful analysis of frequencies, percentages, chi-square values/contributions and probabilities, the five best characteristics were identified for the profile. The five variables are: DOT code of structural work, weekly benefit amount (WBA) of $50 to $149, last separation was not lack of work (LOW), claimant was not registered with Employment Services (ES) and 6 to 10 "full" weeks paid. These last two variables require a brief explanation. The last adjudicatable separation must have been an issue separation with a non-LOW decision rendered. The "full weeks paid" figure is obtained by dividing the total amount actually paid to the claimant by their WBA. Although economic in nature the full weeks paid variable has a different predictive value than WBA (evidenced by a very low negative correlation between the two variables). In fact, none of the five profile characteristics is correlated with the others at a level which could be considered statistically significant. Thus the profile is theoretically and statistically consistent.

The next phase of the profiling effort involved testing the model to determine whether it has "predictive value". The ability to predict an individual's "error potential" is a fundamental purpose of error-prone profiling. A successful profile will have a good measure of predictive value and will accurately target error-prone claimants. It could then be used for error prevention, error detection or both. The profiling process could be cooridinated with some form of "treatment" aimed at error prevention. This treatment could include informational, instructional or educational approaches. A profile could also be used to detect misreported earnings errors after the fact (which would supplement crossmatch). Utilization of the profile for error detection could be done in conjunction with a verification procedure (phone, mail or in-person). Thus the predictive value of the model must be tested and evaluated.

It was determined that the profile should be tested against the claimant population for the first quarter of 1989. Since the model was based on the 1988 claimant population the first quarter of 1989 represents a separate claimant population and, equally important, was the most recent quarter completed by crossmatch. Because of this the experimental run should reveal whether the profile successfully predicts error potential. That is, if the profile has predictive value it should apply to a different claimant population. Those claimants with disallowances due to misreported earnings should be the same ones that "meet" the profiles' prediction parameter (and are thereby targeted as error-prone). In essence, one attempts to capture the largest percentage of the error group possible in the smallest possible percentage of the population.

An example should clarify this last point. The Q.C. unit had previously developed an error-prone profile for work search errors. Test results were successful, with 65.18% of the error group was captured in only 23.75% of the claimant population. Given a successful "treatment program", over 65% of work search errors could either be prevented or detected by targeting one in every four claimants. A large amount of overpaid dollars are associated with work search errors, so utilization of the profile could be practical and potentially beneficial. It was hoped that this study would generate similarly positive results for misreported earnings.

The first step in testing the profiles' predictive value involves ranking every member of the claimant population (for the targeted quarter). This is done with a statistical procedure known as logistic regression. This automated statistical processs (available with SAS) basically assigns a "numeric value" to each claimant. The numeric value is derived from a statistical calculation which evaluates the individual claimant's status for each characteristic in the profile (i.e. whether included/excluded by the variables' parameters). A value is thereby generated for each characteristic and an aggregate value, based on all of the profile variables, is computed for each claimant.

A parameter is then selected to separate the error-prone claimants from the remainder of the population. It is at this point that one attempts to capture the largest possible percentage of the error group in the smallest possible percentage of the population. Obviously the larger the population percentage, the less practical and efficient the treatment process (since it would involve higher costs, more time and greater adminstrative difficulties).

With a prediction parameter of .05 the test results were moderately successful. The profile "captured" 23.12% of the misreported earnings error group in 11.56% of the claimant population. Although this indicates that the profile has predictive value, the results are merely adequate. The test data was also evaluated using a different parameter (.04). The results appear to be better but, practically speaking, are essentially the same. At this level the

profile captured 43.4% of the error group in 25.56% of the population. Although this second parameter caught almost twice as many error group claimants as the first, it also included more than twice the population. It thereby becomes less cost-effective to use. A practical example will serve to illustrate this point. Assume that the "treatment" is 100% effective. Using the .05 parameter on the test quarter data, 3,579 claimants would have to be "treated" in order to prevent/detect 382 misreporting errors. With the .04 parameter 7,912 claimants would require treatment to prevent/detect 717 errors. In the first instance 3,197 non-error claimants underwent treatment while in the second case 7,196 non-error claimants were treated. Additionally, in the .05 example 10.67% of those treated had an error. In contrast, the same figure for the .04 example is 9.06%. Therefore, a proportional increase in treatment subjects does not result in a proportional improvement in error prevention/detection.

This situation is subject to the law of diminishing returns, as savings decrease when the population subject to treatment increases. The greater the number subject to treatment, the greater the time, money and resources necessary to effect the treatment and, in this case, the lower the return. Also, the treatment would occur before or during the error so the actual "savings" may well be less than current methods generate. Thus, regardless of which parameter was used, practical utilization of the current profile does not appear feasible.

Another item of interest should be mentioned here. The crossmatch process was "driven" by sample size on the 1988 quarters and strictly by "pindex" values on the test quarter. It appears that the latter method is more effective at error detection than the former (given a higher percentage for the error group in the test quarter). In addition, the crossmatch audit load for the first three quarters of 1988 (22,000) was much lower than first quarter 1989 (13,000). These differences could have affected the test results by capturing a slightly different "group" than the numeric selection.

Conclusion

For the most part the Q.I.P. study was a successful endeavor. A statistically valid profile was developed and tested. The profile has predictive value, but the value is too low for practical application or effective utilization. Final results suggest that profile utilization would not be cost-effective. Key characteristics were identified by the effort though. As the claimant population changes the adminstration may want to follow-up on the profile and re-examine the misreported earnings profile. Given the change in the crossmatch process, better data should be available in the future. A viable, more practical profile might be developed from the newer data. At the very least, the Department has learned more from, and about, the profiling process as well as more about the U.I. claimant population.

CH-031

COLORADO

- FINAL REPORT -

QUALITY IMPROVEMENT PROGRAM

WORK SEARCH VERIFICATION

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Executive Summary

The study tested a mail verification of work search contacts. It was a follow-up to a previous study which had fair, but inconclusive results. The large sample size on the prior study had a definite, detrimental effect on the results. This study generated good results by utilizing a smaller, more manageable sample. The results were comparable to those produced by Q.C. investigation and, in some ways, were even better. The mail verification is a successful, viable error detection methodology.

INTRODUCTION

The Quality Improvement Program (Q.I.P.) was implemented by the Quality Control (Q.C.) unit in January, 1989. The program was composed of ten separate program improvement studies. Each study targeted one of the three major causes of error identified through Q.C. investigation - base period wages, earnings and work search. One of these studies examined and evaluated a new work search verification procedure. The procedure involved mail verification of all work search contacts reported on the biweekly payorder card. The study sample included ramdomly selected claimants and "profiled" claimants. The study results were somewhat inconclusive (a brief synopsis is presented in the following section) and a follow-up study was recommended. This report details and summarizes the results obtained from the second study.

PROCESS AND RESULTS

The initial Q.I.P. study compared work search error rates between test and control groups. A total of 3,370 work search contacts were rated for the random and profile test groups. The verification procedure proved effective for both test groups. Although a greater number of weeks and claimants with work search errors were found in the profiled test group, the randomly selected test group has a greater error potential in terms of dollars. Comparison of test and control groups proved to be statistically significant in terms of weeks, dollars and case errors. These results provided strong support for the work search verification procedure.

These Q.I.P. study results were then compared with Q.C. investigation results. It was found that the Q.I.P. results were inferior to Q.C. results in several ways. The percentage of contacts rated as "unacceptable" was higher for Q.C. investigations, with a yearly figure of 5.52% compared to the Q.I.P. rate of 3.38%. Q.C. also had a larger percentage of "acceptable" contacts and a smaller percentage of "unverifiable" contacts than the Q.I.P. study produced. The average overpayment, per claimant, was $32.96 higher on Q.C. cases as well. Thus, although the Q.I.P. study was a success by demonstrating that the verification procedure was an effective error detection menthodology, the results were less than what was expected or desired.

The final report recommended that another study be done using a small, manageable sample. One of the major problems with the inital study was the large sample size, as this delayed the entire verification process. It was thought that reuslts obtained from a smaller, more manageable sample (including more timely verification) would be more realistic and representative. If better results are obtained, or at least results comparable to those generated by Q.C. investigation, then the benefits of the work search verification procedure become more evident. This small sample approach should also be more cost effective.

A sample of 100 claimants was randomly selected from the claimant population. The "population" was composed of all claimants that had received a U.I. benefit payment during the prior week. Interstate and job attached claimants were excluded. The most recent weeks paid during the prior week were targeted as the "key weeks". Q.C. staff obtained copies of the payorders for these targeted weeks and a work search verification form was sent to each employer listed as a contact. A purge date was established for the verifications and employers were contacted by phone if they failed to respond to the initial request. Claimant rebuttal was obtained for all potentially disqualifying (i.e. unacceptable) contacts. Study methodology was consistent with the earlier Q.I.P. study to avoid possible biases. A total of 386 work search contacts were rated (an average of 3.86 contacts per claimant). An equivalent control group of 100 randomly selected claimants was also generated at the time of sample selection. The study results are presented in Table 1 below.

TABLE 1

Q.I.P. STUDY RESULTS

	TEST (Verification)	CONTROL (Normal Processes)
Acceptable		
Number	131	N/A
Percent	33.94%	
Unverifiable		
Number	235	N/A
Percent	60.88%	
Unacceptable		
Number	20	1
Percent	5.18%	-
Claimants	11	1
Weeks	17	1
Dollars	$2,737.00	$0

Therefore, the work search verification procedure is more effective at detecting errors than existing system controls. The 20 unacceptable contacts involved 17 separate weeks and 11 different claimants. Thus, the case error rate for the test group was 11% while the control group figure was only one percent. The single work search disallowance in the control group was issued prior to payment, so no overpayment occurred. The week involved was the second week on the biweekly payorder, rather than the "key week" identified during sample selection (otherwise this case would have been excluded from the population and thereby from selection).

Of the 11 claimants with unacceptable contacts: one had three unacceptable contacts in the same week and one had two. Interestingly enough, 54.55% of these 11 claimants had an unacceptable contact on both targeted weeks. The WBA for these claimants varied from a low of $61 to a high of $219. The average overpayment potential, per week, was $161. The largest potential overpayment for a single claimant was $438 and the smallest was $99. The total sample dollars amounted to $16,499, so the $2,737 overpayment potential represents 16.59% of sample dollars. Another item of interest regards the method of contact by Q.C. rating. A breakdown of contact methods and Q.C. ratings is presented in Table 2 below.

TABLE 2

Breakdown of Contact Ratings by Contact Method

	ACCEPTABLE	UNVERIFIABLE	UNACCEPTABLE	TOTALS
MAIL				
Number	6	15	2	23
Percent				
Column	4.58%	6.38%	10.00%	5.96%
Row	26.09%	65.22%	8.69%	
RESUME'				
Number	35	35	--	70
Percent				
Column	26.72%	14.89%	--	18.13%
Row	50.00%	50.00%	--	
PHONE				
Number	13	54	3	70
Percent				
Column	9.92%	22.98%	15.00%	18.13%
Row	18.57%	77.14%	4.29%	
PERSON				
Number	77	131	13	221
Percent				
Column	58.78%	55.75%	65.00%	57.25%
Row	34.84%	59.28%	5.88%	
NO CONTACT MADE				
Number	--	--	2	2
Percent				
Column	--	--	10.00%	0.52%
Row	--	--	100.00%	
TOTALS				
Number	131	235	20	386
Percent	33.94%	60.88%	5.18%	100%

It is evident that the highest percentage of "unacceptables" were in-person contacts. Compared to the overall sample group percentages ("totals") a disproportionate percentage of acceptable contacts were made by resume' while the biggest difference for unverifiable ratings was with phone contacts. All three results are consistent with results obtained from the previous study.

Another way to evaluate these study results is to compare them with results obtained from Q.C. investigation as well as with the results generated by the previous Q.I.P. study. Two different verification methods are represented - the in-person verification done by Q.C. and the mail verification utilized in the two Q.I.P. studies. Expectations should favor Q.C. results since the methodology allows

for a more in-depth style of investigation. The results were, surprisingly enough, just the opposite. The actual figures are presented in Table 3 below. The Q.C. figures are yearly totals covering batches 8827 (7/88) through 8926 (6/89). Yearly totals are provided in order to eliminate seasonal effects and other potential biasis. The figures for both Q.I.P. studies represent test group results only.

TABLE 3

Comparison of Work Search Verification Results

Q.C. vs. Q.I.P.

	Q.C. YEARLY TOTALS	Q.I.P. INITIAL STUDY	Q.I.P. SECOND STUDY
ACCEPTABLE			
Number	475	456	131
Percent	28.84%	13.53%	33.94%
UNVERIFIABLE			
Number	1081	2800	235
Percent	65.64%	83.09%	60.88%
UNACCEPTABLE			
Number	91	114	20
Percent	5.52%	3.38%	5.18%
CLAIMANTS	51	79	11
DOLLARS	$7,890.00	$9,618.00	$2,737.00
AVERAGE OP (Per Claimant)	$154.71	$121.75	$248.82

There are several significant figures contained in this table. First and foremost, it is evident that better verification results can be obtained by using a smaller, more manageable sample. The final ratings are more definite for the second study, with a higher percentage of both acceptable and unacceptable contacts. Even Q.C. results are less definite, as the percentage of unverifiable contacts is almost five percent higher than the results from the second Q.I.P. study. The percentage of unacceptable contacts in the second study is much more comparable to Q.C. results. The difference is so small (.34%) that one may reasonably argue that mail verification is (or could be) just as productive as in-person verification, let alone more cost-effective.

The mail verification has a distinct advantage in terms of dollars (savings). In the second study, the average overpayment, per claimant, is $94.11 higher than Q.C. results. The two-week verification is obviously more productive than the Q.C. "key week"

approach. In addition, the Q.I.P. study took approximately one month to complete. If a similar verification were done ten to twelve times a year, it could detect $27,370 to $32,844 in overpaid benefits involving 110 to 132 claimants (assuming an equivalent detection rate). The cost-effectiveness of a mail verification is contingent upon several factors. This includes sample size, the number of weeks verified per claimant, staff doing the work (salaries vary), frequency of verification, employer participation and the extent to which the process can be automated. The average overpayment from the initial Q.I.P. study is much lower than the follow-up study because the earlier figures reflect a heavy influence from "profiled" claimants. A lower WBA ($25-$150) is a "key characteristic" of the claimant profile (for work search errors). This dramatic effect is absent in the latter study since only randomly selected claimants are represented. In closing, the study was obviously a success and provides experimental verification of an alternative system control for work search errors.

CONCLUSION

The Q.I.P. study generated positive results and, in so doing, presents the Department with an optional error detection methodology. Mail verification of work search activities works. The procedure is at least as effective as Q.C. methodology. Mail verification is also less labor-intensive than Q.C. investigations and should ultimately prove to be more cost-effective. The primary question which remains is how to structure the verification procedure. It is evident that a smaller, more manageable sample is an effective approach. This study represents one method, but another option exists.

The mail verification could be patterned after Q.C. with a weekly sample drawn at random for verification. It was previously recommended by Q.C. that a separate study should be done utilizing this approach. The suggestion was accepted and a year-long pilot study was initiated on 1/1/90. It should be noted that the Q.C. investigators felt that employers do not make the same effort with mail verification that they do with in-person (Q.C.) verification. They felt this was particularly true for unacceptable and unverifiable contacts. The unit will try to be aware of this possibility during the current work search verification study. Final recommendations must await the results of this last study, as the administration needs as much information as possible in order to make a reasonable, productive decision. By supporting Q.I.P. research and actively pursuing alternatives, Colorado's U.I. Administration has demonstrated their ongoing commitment to program improvement.

CH-032

COLORADO

- QUALITY IMPROVEMENT PROGRAM -

FINAL REPORT

WORKSEARCH WORKSHOP EVALUATION

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Executive Summary

This study was an evaluation of the Department's worksearch workshop to determine whether workshop attendance would expedite re-employment and thereby reduce weeks of unemployment. Statistical results have not supported this contention. However, too many confounding factors exist which could (or did) bias the figures, so decisions should not be based solely on the statistical results. A survey was performed by QC investigators and contrary results were obtained, as it revealed overwhelming support for the workshop (especially from the JSC's). It appears that the workshop program is beneficial to those who need it most - U.I. claimants in need of instruction or education to improve their job seeking skills. The study concluded that the workshop can be a valuable service for Departmental clients.

Introduction

The U.I. Quality Control (QC) unit initiated a year long Quality Improvement Program (QIP) in January 1989. Colorado's Q.I.P. project was composed of ten distinct program improvement studies. All ten studies targeted one of the three major error causes detected by Q.C. investigation: work search, benefit year earnings and base period wages. One of these studies involved an evaluation of Colorado's work search workshop. The workshop is a relatively new service offered by the Department, so the question was whether it is effective or beneficial. This report discusses and summarizes the results generated by the Q.I.P. study.

Process and Results

The fundamental tenet of Departmental philosophy is "service excellence". The Department has a longstanding committment to providing quality services to its clients. This is evident in a variety of ways, including improvements to existing operations as well as implementing new processes to address customer needs. An example of the latter is the Department's work search workshop. The workshop was designed primarily as an instructional/educational service. Workshop attendance should provide U.I. claimants with information, experiences and skills which improve and enhance their employability. This should, in turn, result in more prompt re-employment and a shorter duration of unemployment. Actual savings to the U.I. trust fund could result as well.

This study was designed to evaluate the overall (statewide) effectiveness of the work search workshop and to determine whether workshop attendance is beneficial. The workshop may be considered as a "system control" for work search errors, but only by way of error prevention. The greater benefits should be realized by improving the claimants' job search skills. This improvement should then be evident in a shorter duration of unemployment and, thereby, a lower amount of U.I. benefits paid. Thus, the study examined some data elements that would reflect these possible effects.

The initial focus involved three distinct, objective measures: the percent exhausting their U.I. claim, the "full weeks" paid and the "payment ratio". The "full weeks" paid is computed by dividing the total dollar amount paid to the claimant by his weekly benefit amount (WBA). The "payment ratio" is computed by dividing the total dollar amount paid by the maximum benefit amount (MBA). If the workshop is successful, the attendees should be re-employed faster than the non-attendees. This result should, in turn, reflect in the three measures detailed above.

The first phase of the study involved sample selection. A sample of 2,050 claimants was selected from population data on the mainframe. The sample was composed of two groups: a "test" group of 1,024 claimants that attended a workshop and a "control" group of 1,026 claimants that did not attend a workshop. The composition of each group was proportional to statewide demographics as well as to local office proportions. This ensured that both groups were representative. We allowed approximately 26 weeks to elapse before initiating the data analysis.

The sample extract consisted of claimant lists, crosstabulations and various pertinent statistics. A review of this data did not reveal any significant results. In fact, the results were just the opposite of what was expected. The percentage of the test group

(participants) that exhausted their claim was 33.89% compared to 26.22% for the control group. The average number of "full weeks paid" was 13.47 for workshop attendees and 10.64 for non-attendees. The "payment ratio" was .6495 for the participant group and .5216 for the non-participant group. Interestingly enough, there was a greater variation (of values) within the non-workshop group for the latter two measures.

There are some additional figures worth noting here. The average WBA for attendees was $148 and the average MBA was $3,192. In contrast, the average WBA for non-attendees was $154 and the average MBA was $3,284. On average, the workshop group claimed more weeks (16.31) than the non-workshop group (13.44) and had more weeks paid as well (13.92 as opposed to 10.99). The non-participant group also had a greater degree of variation for weeks claimed and for weeks paid. This may suggest that the workshop group is, in general, more stable than the non-workshop group. The question at this point is why the workshop group has higher values for the critical measures than the non-workshop group.

Further extensive analysis was performed in an effort to account for the somewhat unusual and unexpected results. As a result, a number of confounding factors were identified. Taken as a whole, these factors undoubtedly had a dramatic influence on the Q.I.P. study results. A synopsis and discussion of these items follows.

It was found that 25.73% of the non-workshop group had claimed only 1-5 weeks of benefits and, more importantly, 12.77% did not claim a single week. This compares to the workshop group figures of 17.38% and 4.3%, respectively. Thus, benefits were not claimed by almost three times as many non-workshop claimants. A comparison of test and control groups within each local office revealed some wide variations in the "full weeks" and "payment ratio" values. There was, in fact, an office where these two measures were just the opposite of the averages cited above. For this particular office, the workshop attendees had lower averages than the non-workshop group. This latter result highlights a fundamental problem with aggregating the statewide figures, since each local office was responsible for designing, implementing and administering their work search workshop. This independent responsibility allows for a great deal of variation in terms of the structure and content of the workshop. A sole reliance on statistical results would fail to compensate for this variable. Thus, the workshop evaluation is subject to this additional qualification.

The comprehensive analysis revealed several other items of interest (most, if not all, of which had a heavy influence on overall results). It was found that the workshop group had to file a greater number of weeks than the non-workshop group to obtain an equivalent percentage of their MBA. Generally speaking, more weeks claimed equates to more weeks paid. This, in turn, should raise both the "full weeks" figure and the "payment ratio". The percentage exhausting their claims should also increase as the

number of weeks claimed increases. An office by office comparison revealed that workshop claimants had already submitted a claim for weeks which the non-participants did not file for, so the "minimum number of weeks claimed" was already higher for the workshop group (for almost every local office). In addition, the actual date of workshop attendance varied, occurring two to ten weeks into the claims process. Thus, the deck was already "stacked", so to speak.

Through the course of this analysis, it became evident that the workshop attendees are actually a different "group" than the non-attendees. The workshop group had a higher percentage of DOT codes for "clerical/sales" and "service" while the higher percentage of non-participants were coded as "structural work". A review of S.I.C. codes produced similar results, with the workshop group reflecting a higher percentage coded as "trade" or "services" and the non-workshop group a higher percentage under "construction" (and, to a lessor degree, "manufacturing"). This is theoretically consistent, as one would expect lower workshop attendance from individuals in the construction industry (especially considering that workshop participation is voluntary, layoffs are short term, and jobs are easier to obtain than in other industries).

These qualifications and results indicate that workshop claimants represent a different subgroup in the population than non-attendees. The findings show that workshop participants represent the group that truly "needs" U.I. services (benefits and the workshop). They constitute the group most in need of the skills, experiences and services provided by the workshop. Given that workshop attendance is voluntary, the participants obviously recognize some need(s) on their part that the workshop addresses. Thus, to a certain degree, the claimants' self-perception encourages participation.

In the final phase of this Q.I.P. study the claimants' (participants and non-participants) and the JSC managers' perspectives were solicited to ensure a more comprehensive evaluation. The claimants were questioned on why they elected to attend or not attend the workshop. Participants and JSC managers were also asked to evaluate the workshop itself.

A sample of 100 participants and 100 non-participants were randomly selected in proportions equivalent to statewide figures (for each local office). It was known beforehand that the response rate could be poor since the target quarter was almost a year old. Hence this part of the study was really an informal mini-survey. The same quarter was used throughout this study to promote consistency.

The survey results were interesting, but not surprising. Non-participants were asked why they decided not to attend the workshop. Of those responding, 43.75% indicated that they did not remember (either the workshop being offered or why they did not attend), 34.38% reported that they did not need what the workshop offered, 12.5% were re-employed before the workshop date, 6.25% had

time, scheduling or other conflicts which precluded attendance and 3.12% were job attached. Collectively, 50% of the respondents (90.48% of those citing an actual reason) felt they did not need the services provided by the workshop. In contrast, 39.54% of the survey respondents that attended a workshop did so because they thought it would be beneficial. The majority of attendees (55.81%) cited strong emphasis and encouragement by local office staff as the primary reason. The workshop evaluations were overwhelmingly positive, with 88.37% of respondents indicating that the workshop was beneficial (personally and in general).

Finally, interviews with several local office managers provided further support of the workshop program. Virtually all of the managers thought workshop attendance was beneficial and supported the workshop project (albiet not without some modifications). The claimant feedback has been extremely positive according to these managers (and other agency staff), with almost all claimants indicating that the workshop was beneficial. In short, clients and agency staff alike support the work search workshop program.

SUMMARY

By way of suggestion, it appears that the workshop needs to be standardized on a statewide basis. This is particularly true as far as the scheduling interval is concerned since managers felt that early scheduling results in higher attendance. Managers also thought the workshop should be run in conjunction with the ERP rather than in lieu of the ERP. The workshop should be of standard duration, form and content (with minor attenuations pertinent to the local labor market). Perhaps standardized training for agency staff that provide the workshop would be helpful. Periodic self-monitoring of workshops might also prove beneficial, as problems could be identified and resolved.

The Q.I.P. study was a successful and worthwhile endeavor. The workshop is perceived as a valuable program by claimants and agency staff alike. It most benefits those who have the greatest need for such services. The consensus opinion strongly supports the work search workshop program. Claimants attend because they perceive a need for the services. The workshop addresses these concerns in a practical, useful manner. Although the statistical results were not what was expected, a number of confounding variables exist. Undoubtedly these variables had a negative effect on the statistics, so they are misleading if taken alone or without qualification. On the whole, the study results tend to support the workshop program. This is particularly true from the perspective of workshop clients. It is therefore recommended that the workshop program be continued (with, perhaps, minor modifications) since it provides practical, valuable services to agency clients.

CH-033

COLORADO

QUALITY IMPROVEMENT PROGRAM

- FINAL REPORT -

UNREPORTED EARNINGS PROFILE

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Executive Summary

This study was an attempt to develop a claimant profile for unreported earnings. A successful profile could be utilized to prevent or detect these earnings errors. A profile was developed and is composed of five key characteristics: WBA ($50-$149), job-attached, last separation other than lack of work, 6-10 full weeks paid and a S.I.C. code of construction. The profile was tested on data from a subsequent quarter. The test results were only moderately successful. The profile does have predictive value, but this value is insufficient for practical application. It is recommended that the profile be re-examined at some future date, as new data may generate better results. The profiling effort was, on the whole, educational and successful.

Introduction

The Colorado Quality Control (Q.C.) unit initiated the Quality Improvement Program (Q.I.P.) in January, 1989. This is a year long program composed of ten separate program improvement studies. All ten studies examine or involve one of the three major causes of error: base period wages, earnings and work search. One of these studies was an attempt to develop a claimant profile for unreported earnings. A profile is a particular "set" of claimant characteristics which, in conjunction with one another, are peculiar to the error prone group. A successful profile has a certain degree of "predictive" value, as the existence of some or all of these characteristics indicates a propensity for unreported earnings errors. This report details and summarizes the developmental process undertaken by Q.C. and the study results generated by this endeavor.

Process and Results

An analysis of Q.C. investigation results for the last three years revealed that earnings errors are a significant cause of improper payments. In fact, earnings errors are second only to work search in terms of claimant-responsible improper payments. There are two types of earnings errors: misreported earnings and unreported earnings. The former is being addressed by two other Q.I.P. studies while the latter was the focus for this study.

The Department has an existing system control for unreported earnings in the form of the crossmatch program. The crossmatch process is particularly effective at detecting unreported earnings errors. Nonetheless, some errors will, for various reasons, remain undetected. Crossmatch has only minimal value in terms of error prevention since it is, by design, an error detection methodology. Given the timeframe inherent to the crossmatch process (of necessity), the detected errors tend to involve multiple weeks and substantial overpayment amounts. The question is whether another system control could be developed for unreported earnings which could be used for error prevention but would also enhance error detection and supplement the crossmatch program. The Q.C. unit proposed the development of a claimant profile for unreported earnings, as it could be used to prevent or detect errors while complementing crossmatch.

The basic idea is to identify specific, "key" characteristics of the error-prone group. A profile (or "model") refers to this set of identified characteristics. Although many individuals in the claimant population will possess some of these characteristics they should, as a whole, be more predominant in the error-prone group. Thus the existence of these characteristics would be a good indicator of "error potential". The only risk is by way of negative results, as "key characteristics" may not exist for this group.

Several related questions arose at this stage. Should the profile be based on Q.C. data or mainframe data? How should this data be organized or formatted? What distinguishes the error group from the non-error group? What constitutes the "claimant population" and what timeframe is appropriate? Which characteristics should be examined and which excluded? How are the key characteristics to be identified?

It was decided that the profile should be based on mainframe data. The Q.C. data is more than adequate for most purposes, but the number of unreported earnings errors is simply insufficient to develop a statistically valid profile. Using mainframe data allows for consideration of the entire claimant population and eliminates any possibility of sampling error/bias. It was also decided that the error group should be composed of all claimants that had made an earnings error which resulted in an overpayment. This eliminates claimants that over-report earnings and those that compensate for their error(s) later in the claim sequence. The majority of the error group was composed of claimants caught by crossmatch. The claimant population for calendar year 1988 was used to develop the profile. This provided a suitable timeframe and sufficiently large

numbers The necessary data was not generated until crossmatch was completed on all four quarters. Only interstate claimants were excluded from this population.

The data extract was organized into a series of crosstabulations. These "crosstabs" included virtually every characteristic available on the mainframe database. Some of these variables were broken-down in two or more ways. For example, the claimant's DOT code was examined for the first digit only, the first two digits and the first three digits. A number of additional crosstabs, relating one characteristic with another, were reviewed in order to crosscheck information, verify analytical determinations and uncover inter-relationships between variables. Every crosstab included the frequencies, percentages (column, row and overall), chi-square statistic and associated probability. A few characteristics (sex, age and ethnic) were excluded from consideration as possible profile variables due to their sensitive nature.

The initial analysis focused on frequencies and percentages. Each value of a given characteristic will have a certain number and percent in the error and non-error group. The basic idea is to identify the values which are higher for the error group compared to the non-error group. The inordinately high percentages indicate that the specific value of the variable may be more unique to the error group than the non-error group. It must then be determined whether the observed difference is statistically significant or merely due to chance.

To determine the significance of a given frequency and percentage the chi-square statistic and associated probability are reviewed. The chi-square value and probability indicate whether the table (crosstab) results are a random phenomena or due to some unique interrelationship between the two variables (i.e. the error/non-error groups and the particular characteristic). If it is significant the individual cell(s) contribution to the chi-square value is computed. A "cell" refers to a specific value of a characteristic for a given group. If the crosstab itself is significant, a number of cells will also be significant. Thus, this part of the analysis focused on the potentially significant cells for the error group.

This comprehensive analysis resulted in a list of the potential "key characteristics" for the profile. The list was fairly extensive and, since a profile should be comprised of four to six variables, the next phase involved eliminating the inappropriate characteristics. Ideally, the best characteristics will have the highest frequency/percentage in the error group and will have the greatest contribution to the crosstabs chi-square statistic. The original list of potentially significant characteristics had 83 separate values identified for 29 variables. This was narrowed down to 11 values for 10 different characteristics. Some of these 10 variables were highly correlated with one another but at least five separate, unrelated characteristics were identified.

The five variables are: S.I.C. code of construction, job attached, weekly benefit amount (WBA) of $50 to $149, last separation was not lack of work (LOW) and 6 to 10 "full" weeks paid. Regarding these

last two variables, the last adjudicatable separation must have been an issue separation with a non-LOW decision rendered. The "full weeks paid" figure is computed by dividing the total amount actually paid by the claimant's WBA. Although economic in nature this variable is a different type of indicator than WBA, evidenced by a very low negative correlation between the two variables, so it has a separate "predictive value". In fact, none of the five profile characteristics is correlated with the others at a level which could be considered significant. Thus, the profile is internally consistent and structurally sound.

The next step involved testing the profile to determine whether it has "predictive value". The ability to predict an individual's "error potential" is a fundamental purpose of error-prone profiling. A successful profile should identify error-prone claimants as accurately as possible. The profiling process could be aligned with some type of "treatment" aimed at error prevention. Treatment could be by way of information, instruction or education. A profile could also be used to detect unreported earnings errors which have already occurred (and could be utilized in conjunction with a mail, phone or call-in verification procedure). We therefore needed to test and evaluate the predictive value of the model.

The profile was tested against the claimant population for the first three months of 1989. Since the model was based on the 1988 claimant population, the first quarter of 1989 represents a separate "population". The experimental run should, for this reason, reveal whether the profile successfully predicts error potential. The claimants with a disallowance due to unreported earnings should also be the ones that "meet" the model's prediction parameter (and are thereby targeted as error-prone). In essence, one attempts to capture the largest percentage of the error group possible in the smallest possible percentage of the population.

For example, Q.C. developed a claimant profile for work search errors where 65.18% of the error group was captured in only 23.75% of the claimant population. This means, presupposing a successful "treatment program", that over 65% of work search errors could either be prevented or detected by targeting one in every four claimants. It was hoped that this study would generate similar results for unreported earnings.

The first step in testing the model's predictive value involves ranking every member of the claimant population (for the targeted quarter). This is accomplished by using a statistical procedure known as logistic regression. This automated statistical process (available with SAS) basically assigns a "numeric value" to each claimant. The numeric value is generated by a statistical calculation which evaluates the claimant's status for each characteristic in the profile (i.e. whether included/excluded by the variables' parameters). An aggregate value is thereby produced for each claimant.

A parameter is then selected to separate the "profiled" claimants from the remainder of the population. It is at this point that one attempts to capture the largest possible percentage of the error group in the smallest possible percentage of the population.

Obviously, the larger the population percentage is the less practical and efficient any treatment process would be (as it would be more costly, time-consuming and difficult to manage). The first parameter selected was .05 and the results were moderately successful. It was found that the profile captured 24.39% of the unreported earnings error group in 10.85% of the claimant population. Although this indicates that the profile does have predictive value, the results are merely adequate. The test data was also evaluated using a parameter of .04 but the results were essentially the same. The profile captured 50% of the error group in 27.78% of the population. Although this second parameter caught twice as many error group claimants as the first so, too, did it involve over twice the population as the first parameter.

This situation is subject to the law of diminishing returns, as the benefits lessen when the population subject to the treatment increases. The greater the number subject to treatment, the greater the time, money and resources necessary to effect the treatment. The proportional increase would not be cost-effective since twice the population percentage is a much higher number than twice the error group percentage. In addition, the treatment would occur before or during the error so the "savings" (i.e., overpaid dollars detected by the treatment) would be less than current methodology (and crossmatch will detect most, if not all, of these same errors). Thus, regardless of which parameter was used, practical utilization of the current profile does not appear feasible.

Another item of interest should be mentioned here. The error group upon which the profile was based represents 2.97% of the 1988 claimant population whereas the error group in the test run represents 5.34% of the first quarter 1989 claimant population. This is a potentially significant difference in percentages. Further investigation revealed that the crossmatch process was "driven" by sample size on the 1988 quarters and strictly by "pindex" values on the test quarter. It appears that the latter method is more effective at error detection than the former. In addition, the crossmatch audit load for the first three quarters of 1988 was much lower than first quarter 1989 (with 22,000 for all three quarters compared to 13,000 for the test quarter). These differences, particularly the methodology, probably account for the increase in the error group percentage.

Of the five variables the "not lack of work" (NLW) was the strongest for the 1988 claimant population as well as for the test quarter results. At the .05 level, 93.39% of the 1988 profiled claimants possessed the NLW characteristic. The same figure for the test quarter is 95.42%. At the same level, 66.35% of the 1988 error group possessed the NLW characteristic compared to 71.85% for the test quarter error group. All four percentages are higher than the same figures for the other four variables and are much higher than the non-profiled and non-error groups. Thus, NLW is certainly a "key" characteristic for unreported earnings errors.

Conclusion

The Q.I.P. study was, on the whole, a successful endeavor. A statistically valid profile was developed and tested. The profile does have predictive value, but this value is too low for practical, effective utilization. Given the final results, profile utilization would probably duplicate efforts with the crossmatch program and would be less cost-effective. However, some key characteristics were identified. As the claimant population changes through the next year or so, management may want to follow-up on this study and re-evaluate the unreported earnings profile. Given the change in the crossmatch process, better data should be available in six to nine months. A viable, more effective profile could be developed based on this newer data. At the very least, the Department has learned more from, and about, the profiling process as well as more about the U.I. claimant population.

CH-034

COLORADO

QUALITY IMPROVEMENT PROGRAM

- FINAL REPORT -

WORK SEARCH

PROFILE UTILIZATION

AND

ERROR PREVENTION

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Executive Summary

The study was an attempt to determine wheher the claimant profile (for work serch errors) could be used to target individuals for workshop attendance. Statistical results suggest that both "error group" and "profiled" claimants could benefit from workshop attendance. Although the study figures could be misleading due to the small size of the error group, there is no doubt that the profile is targeting error-prone claimants. Therefore, the profile can be effectively used as a selection criteria. The underlying belief is that workshop attendance will, in general, have beneficial effects (especially in terms of the work search error group). The study concludes that the profile should be utilized and provides some potentially useful suggestions in this regard.

Introduction

The Colorado Quality Control (QC) unit implemented the Quality Improvement Program (QIP) in January, 1989. The year-long QIP project was composed of ten separate program improvement studies. Each study targeted one of the three major causes of improper benefit payments: work search, earnings or base period wage errors. There were five separate studies dealing with work search, as it constitutes the most frequent claimant-responsible cause of error and involves a substantial amount of overpaid dollars. The agency has addressed this problematic area with a variety of measures. Two of these significant efforts, the work search error "claimant profile" and the statewide "worksearch workshop", were incorporated in one of the QIP studies. The study examined the feasibility of utilizing the error-prone profile to identify and target claimants for participation in the worksearch workshop. This report presents and summarizes the results obtained from the QIP study.

Process & Results

The Department has an explicit, longstanding committment to quality service. This committment is evidenced in a variety of ways, with improvement to existing operations as well as implementation of new processes which address client needs. An excellent example of the latter is the Department's worksearch workshop. The workshop functions in an educational/instructional capacity and provides valuable services to clients. It is designed to furnish U.I. claimants with useful information, experiences and skills. Workshop attendance should result in improvements in the individuals work search process and thereby enhance their "employability". Utimately this should result in more prompt re-employment and a shorter duration of unemployment.

Results from another QIP study revealed that workshop attendees, as a group, are the claimants most in need of workshop services. A separate but related question arose regarding claimants that are prone to make work search errors. These claimants represnt another group which could benefit from workshop attendance, as attendance might serve to prevent work search errors. If enhanced employability equates with shorter duration, then some members of the error-pone group will become re-employed prior to making an error. In short, these error-prone claimants should be strongly encouraged to attend the work search workshop. Ideally this should result in fewer errors, better client services and greater "customer delight". The quesiton is how to target this error-prone group. Whether actual savings will result from this effort becomes a secondary issue since this group is, by definition, one which "needs" (or could benefit from) the workshop.

The QC unit has developed a claimant "profile" for work search errors. Previous tests revealed that the profile does have "predictive value" (capturing approximately two-thirds of the error group in less than one-quarter of the claimant population). Thus the QC unit proposed a QIP study which would determine whether the profile could be effectively utilized as a selection criteria for workshop attendance. The profile could be used to identify the error-prone claimants. They could then be targeted for workshop participation via strong encouragement. The study was therefore designed to evaluate the potential integration of these two worksearch-oriented efforts.

The original study design required four sample groups of 50 claimants each - profiled/random by participants/non-participants. Analysis and comparison of work serch error rates for these four groups should reveal whether the profile still has predictive value as well as whether the profile could be an effective selction criteria for workshop attendance. Unfortunately there was only one work search disallowance in the entire group of 200 claimants - far too low for any practical use. The decision was then made to examine a full quarter's data as this should provide sufficient numbers for the QIP study. The sample extract was obtained using the second quarter of 1989. Several of the more pertinent figures are itemized below.

Statistical Synopsis :

- The extract covered 16,677 intrastate claimants.
- 75% of the claimants did not attend a workshop.
- 24.8% of the claimants "met" the profile (i.e, were predicted to be error-prone).
- 70.93% of the "profiled" group did not attend a workshop.
- 68.75% of the actual work search errors were predicted.
- 99.84% of the claimants that did not meet the profile did not have a work search error.
- 67.91% of the profiled group with work search errors did not attend a workshop.

Although some of these figures are meaningful, they can be misleading. It should be noted that, of the 16,677 claimants, only 64 were actually disallowed due to work search errors. The true number of work search errors is probably much higher. The primary system control which detects work search errors is the Eligibility Review Program (ERP). It is supplemented by QC investigations as well as other (less frequent) sources. ERP's have been temporarily suspended while the worksearch workshop is being piloted in Colorado. Some ERP's are being done, but the actual number is significantly below normal levels. Based on 1988 results we would expect 750 to 800 disallowances during this quarter (all other things being equal). Thus any utilization of these results should be cautious, given this qualification.

One of the more meaningful statistics cited is the 68.75% of worksearch errors which were predicted. This particular result was statistically significant, with an extremely low probability of being obtained by chance. This conforms to previous tests of the profile where approximately two-thirds of the work search errors were predicted by the profile. This result indicates that the profile continues to have predictive value. The 68.75% of errors were "captured" in only 24.81% of the population (which also conforms to previous tests). These various results make it safe to conclude that the work search profile effectively identifies error-prone claimants.

The final question remaining is whether the profile could be used as a selection criteria for workshop attendance. Unfortunately the answer is neither clear-cut nor absolutely certain. Some of the study results support using the profile in this manner. There are three specific figures which support profile utilization: (1) 70.93% of the profiled (predicted) group did not attend a workshop, (2) 67.19% of the error-group did not attend and (3) 65.91% of the profiled group that had an error did not attend. These results suggest that either the error-group claimants tend towards non-participation or the non-participants tend to make work search errors. However, it must be noted that confounding factors may exist (i.e., other factors could potentially account for these results). In addition, the relatively small number of work search disallowances suggests caution. Nevertheless, if one accepts the premise that workshop attendance may prevent (at least some) work search errors, then it appears that the profile could be utilized as a selection criteria. Specific recommendations are presented in the summary section which follows.

Summary

The domain of work search involves a variety of complex issues. There are no easy solutions - a "quick fix" does not exist. The Department's approach has, for this very reaon, been multi-faceted. The worksearch workshop is but one of many efforts. That the workshop provides a valuable service to clients has been demonstrated by a separate QIP study as well as by numerous sources, both internal and external. Basd on the study results detailed here, it does appear that improvements can be made.

By way of recommendation, the claimant profile could be utilized to target claimants for workshop attendance. This should not be done in a punitive manner, nor should it replace any current methods. Rather, it should be used to supplement current processes, as another tool or "selection criteria". For example, "profiled" claimants could be identified on a regular basis. Lists could be forwarded to the local offices. Staff could then strongly encourage profiled claimants to attend the workshop. Proper work search methods could be reinforced at the same time. The question of how to identify the non-participants that could benefit the most from participation is addressed by using the profile as a selection criteria.

Encouraging error-prone claimants to attend a workshop may or may not reduce the work search error rate, but it certainly wouldn't increase the rate. Subsequent analysis will determine the answer to this question. However, education is surely one valid answer to some of the numerous work search issues. The workshop is an excellent example of a worthwhile educational endeavor. It makes good sense to enhance its value in any way possible. Using the error-prone profile to target claimants for education or workshop attendance could prove to be quite beneficial. If used properly, in a non-punitive fashion, the potential for negative effects (or criticism) is eliminated.

A final, but important, consideration will be voiced by the pragmatist that questions "practicality and cost". Cost estimates would be difficult, if not impossible, to ascertain at this stage. Actual costs will be contingent on how the procedure is implemented as well as "what" is implemented. If the procedure is computerized, the initial programming costs represent the major amount while follow-up expenses could be limited to printing and program run-time. In this example, JSC's would be provided with lists of profiled claimants and instructed to strongly encourage workshop attendance to these individuals. A second alternative here is to print notices which promote the workshop and include them with the payorders/checks. A third option could be further education regrding work search. This could be done by mailing pertinent information (or a brochure) to profiled claimants or by calling them into the JSC for one-on-one or group counselling.

Given appropriate consideration, the practicality of profile utilization becomes evident. Ultimately, the pragmatic argument is self-defeating. The potential benefits are manifold, including broadened customer service, greater utilization of the worksearch workshop, lower error rates, shorter duration on U.I., improved emphasis on client needs, enhanced customer delight and, perhaps most important, providing valuable services to those clients that could benefit the most from such services. This approach is predicated on a philosophy of "customer service excellence". It provides a practical, fairly inexpensive means of improving current agency services. Other options could be more, or less, costly. However, the "treatment group" represents approximately one-quarter of the claimant population, so the potential expense is reduced even further if the procedure is limited to profiled claimants. Although the error group was small in number (due to the trade-off between the workshop and ERP), the error potential is great (as evidenced by QC rates calculations for work search errors). Thus management has a new process available which addresses this larger domain of "error potential".

In closing, this QIP study proved to be a successful endeavor. The stated objectives were realized by the study. It demonstrated a practical, non-punitive way to utilize the error-prone profile developed by QC. This constructive utilization could generate numerous potential benefits. At the very least, it provides more information and options to management than were previously available. This study is yet another example of the Department's committment to both program improvement and a quality U.I. program.

CH-035

COLORADO

QUALITY IMPROVEMENT PROGRAM

- FINAL REPORT -

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- MISREPORTED BASE PERIOD WAGES -

* INFORMATION CAMPAIGN *

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July 1990

Executive Summary

The study evaluated the effects and potential benefits of an information campaign aimed at Colorado employers. The campaign involved a statewide mailing to all employers emphasizing the importance of proper wage reporting. This included a reminder about reporting wages when paid rather than when earned as well as other information pertinent to base period wage reporting. It was thought that the information campaign could help to reduce the frequency of misreporting errors. Study results were somewhat inconclusive. Raw data showed an improvement after the campaign, as did the percentages. However, a test of the case error rate was not statistically significant. In lieu of any other major changes pertaining to this area, the study concluded that the information campaign had a positive impact on misreporting errors (although the true extent of this impact is indeterminable).

Introduction

The Colorado Quality Control (QC) unit implemented the Quality Improvement Program (QIP) in January, 1989. The year-long QIP project was composed of ten separate program improvement studies. Each study addressed one of the three major causes of error detected by QC investigation (work search, earnings and base period wages). QC results indicate that misreported base period wages continues to be the most frequent cause of error. Wage errors involve numerous improper payments and are the leading cause of underpayments. This area has tremendous potential in terms of improperly paid weeks, especially since a wage error will, by design, affect every week paid on a claim. Hence two of the ten QIP studies done in 1989 targeted this problematic domain. This report presents and summarizes the results obtained from one of the QIP studies targeting base period wage errors.

Process & Results

The Department has demonstrated a longstanding committment to a quality U.I. program and top-quality service. This committment is evident in various program improvement efforts aimed at existing operations as well as in implementation of new programs/processes to meet client needs. QC results, particularly the error rates, indicate a need for additional system controls pertaining to base period wage errors. Misreported base period wages has been the most frequent cause of error for the last four years and affects a large number of paid weeks. Fortunately these errors have been relatively minor thus far in terms of dollars. Nonetheless, the problem remains and must be addressed. The area has great potential for more serious problems, so any improvements should result in both tangible and intangible benefits.

Given the enormous variety of employers in the state and the numerous possibilities for error (on base period wages), a limited number of options are available. A fundemental concern here was that the system control proposed in the QIP study would address as many types of errors as possible without being too costly or impractical. It must also be non-punitive and non-antagonistic in nature. The focus was on error prevention rather than error detection. The Administration also preferred an educational approach. The QC unit proposed a QIP study which would examine the benefits and effects of an employer-oriented "information campaign". The campaign encouraged proper wage reporting, informed employers of the consequences of improper reporting (including a brief but informative historical perspective of base period wage errors based on Q.C. results) and asked for their help in solving the problem. The study was therefore designed to evaluate the potential benefits of this information campaign.

The campaign took the form of an official Departmental letter which was mailed to every employer in the state (and to a few out-of-state employers as well). It was sent under the signature of the U.I. Director to further accentuate its importance. It was estimated that approximately 90,000 employers received the mailing. Although QIP staff developed the material, several levels of administrative staff reviewed and signed-off on the form and content of the mailing. This was done to ensure conformance with State procedures, policies and laws and also served to publicize the effort within the Department.

A primary question was how to measure the "effects" the campaign had on base period wage errors. That is, how to quantify the process to obtain a realistic estimate of the potential benefits generated by the information campaign. In order to evaluate these effects the appropriate cases must first be identified. The targeted "errors" were improper payments caused by misreported base period wages. These errors necessitate a redetermination on the U.I. claim. The BPC unit uses a specific code for over and under payments caused by a

redetermination. These over and under payments could thereby be identified on the master database (mainframe). This answered the question of "how" to identify the pertinent sub-group. It was then decided that various numeric results would be used to evaluate the success of the campaign, using the standard before and after (campaign) groups common to research design. This resolved the question of how to quantify the evaluation.

A quarter was selected for the "before", or base-line, figures (3/88). A data extract was obtained from the U.I. Reports unit. The extract included a list of every improper payment caused by a redetermination during that quarter. The computer records (screens) were reviewed for every claimant on the list. The amount of improperly paid dollars and the number of improperly paid weeks were recorded for every instance of error attributed to employer misreporting. Quarterly totals were computed for the weeks and dollars in error, with separate totals for over and under payments. The case error rate was also computed.

The same quarter for the following year (3/89) was selected as the "after" quarter. Selecting the same quarter from each year served to eliminate seasonal and other potential biases and ensured that results for each quarter were comparable. The identical figures were computed for the after quarter (in the same way as the before quarter).

The hypothesis of the study was simple. If the information campaign was successful, the statistics for the after quarter would be lower than those for the before quarter (all other things being equal). That is, there should be fewer case errors, fewer weeks in error and/or lower over/under payment amounts. The number of improper payments associated with redeterminations should also decline if the campaign was a success. This was, in fact, exactly what happened. The most pertinent figures are presented in the statistical summary on the next page.

* Statistical Synopsis *

Improper Payments Caused By Monetary Redeterminations

	BEFORE	AFTER
CASE ERRORS		
TOTAL	724 *	532 *
OVERPAYMENTS	131	109
UNDERPAYMENTS	595	430
ERROR RATE	12.71%	11.90%
WEEKS		
TOTAL	3394	2395
OVERPAID	656	450
UNDERPAID	2738	1945
DOLLARS		
OVERPAID	$23,403.50	$12,687.50
UNDERPAID	$78,247.75	$56,180.75
CASE AVERAGES		
OVERPAID		
WEEKS	5.01	4.50
DOLLARS	$178.65	$116.40
UNDERPAID		
WEEKS	4.60	4.52
DOLLARS	$131.51	$130.65

* Note: Two cases from 3/88 and seven from 3/89 had both over and under payments, so the sum of over & under paid cases exceeds the TOTAL.

Virtually every figure in the "after" column is better (lower) than the equivelant "before" figure. The number of redeterminations also declined, going from 5,698 (3/88) to 4,472 (3/89). These results suggest that the campaign was indeed a success. Some of the more interesting figures detailed above are: the dramatic decrease in the average amount overpaid (down by $62.25), the decline in the number of case errors (both over and under payments), the lower number of weeks in error and the large decline in over and under paid dollars.

By way of qualification, the actual workload was down in 1989. There were fewer active claims in 3/89 compared to 3/88, so interpretation of these results must be moderated by this factor. The lower caseload may account for the decrease in the number of redeterminations for 3/89 which, in turn, affects the statistical evaluation of study results. These effects are particularly evident in the case error rates. For 3/88 the rate was 12.71% (i.e., 12.71% of redetermined claims had an improper payment). The case error rate for 3/89 was 11.9%. The rates represent only employer-responsible wage errors. The standard statistical test revealed no significant difference between these two proportions. Based solely on this figure it could not be concluded that the information campaign had a positive effect on base period wage errors. However, a number of the results detailed above are much better for the "after" quarter. This suggests that the campaign did, in fact, have a positive effect. Several measures of campaign "success" were outlined earlier in this report. Virtually every one of these was better after the campaign (the case error rate being the notable exception). Thus, in lieu of any other significant program changes dealing with this area, it is concluded that the information campaign had a positive impact on base period wage errors, although the exact nature and extent is indeterminable.

Summary

Base period wage errors involve a variety of complex problems. The questions are tough. Easy solutions do not exist. The information campaign appears to have had some success, but it is not the only answer. Certainly the PR benefits are worthwhile. It did seem to make employers more aware of the problem and, perhaps, more careful when completing subsequent wage reports. The campaign thus serves as one small part of a greater whole, but a valuable part nonetheless.

By way of recommendation, QC suggests that the information campaign be continued on a periodic basis. The actual cost of the campaign was minimal. Since initial expenses were primarily for mailing, the costs could be further reduced by inclusion with other regular or periodic Departmental mailings (instead of a special mailing). It is also suggested that the campaign be done once or twice a year, as it could lose effectiveness if done too often. It could also be combined with other PR-type mailings or notices, as a sort of "customer-awareness" information package or approach. The philosophy behind this approach is similar to Interactive Management principles, which fits nicely with current Administrative philosophy. Several potential benefits could result, including lower error rates and enhanced customer delight. Other options could be more costly, while this represents a fairly inexpensive form of error prevention.

In closing, this QIP study was another successful endeavor. The stated objectives were, for the most part, realized by the study. This study, combined with the other 1989 QIP studies, provides further evidence of the Department's committment to both program improvement and to a quality U.I. program.

CH-036

UI Quality Control Program Improvement Study

ES/UI LINK STUDY
(original title: Improving Feedback from ES on Claimants Referred on Job Orders)

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June 1990

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ES/UI LINK STUDY

INTRODUCTION & BACKGROUND

The Department's Quality Unemployment Insurance Project (QUIP) Committee and the National Office approved this study. The intent of the study was to assess the relationship between ES and UI in two disparate local offices, with possible inferences for overall local-office operations.

More specifically, answers were sought for some basic ES/UI questions: (1) To what extent is ES serving claimants? (2) To what extent is ES placing claimants? (3) Is claimant information being correctly recorded on job orders and work applications? (4) Is there a proper communication flow between ES and UI? (5) Is the information on job orders concerning referral results of claimants complete and accurate? (6) Are non-monetary issues and hires (and claimant earnings) being reported?

The QUIP committee selected Richfield, a small rural office, and Ogden, a large urban office, as the local offices to be studied. Closed job orders (514s) for January and February 1990 were used as the basic document/printout to begin the study. In addition, Applicant Referral Histories (ARHs), Benefits Transcripts (BENs), and Work Applications (511s) were obtained for each claimant referred on the job orders.

PROCEDURE

The study consisted of two phases. The first phase included counts and reviews of the printouts referred to above. This was intended to provide some measure of the extent of service to claimants.

In addition, the 514s and 511s were reviewed to determine if the claimant status was indicated for all claimants. Also, BENs were reviewed to determine whether ES-supplied information had been posted.

The second phase consisted of contacts made by Quality Control (QC) investigators (usually by telephone) on all the job orders from which one or more claimants were referred. Employers were asked to check their records carefully concerning these claimants. Since this was a second contact with each employer concerning the results of job applicants (the local office having previously made contact on the referral results), the reason for the call was briefly explained to each employer.

Previously undetected issues and hires (including earnings reports) were resolved by the QC investigators.

STUDY PHASE ONE - REVIEW OF HISTORY

Much of the study consisted of examining the Department printouts of the selected closed job orders (514), Benefit Records (BEN), Job Applications (511), and Applicant Referral Histories (ARH). Table 1 shows the proportion of job orders which had claimants referred from each local office. Included in the study were all Richfield job orders closed between the first of January and the third week of February 1990. As for Ogden, the study included all job orders closed in the final two weeks of January 1990. The intent was to obtain an adequate and comparable number from both offices without using some selection criteria which could screen out certain types of job orders. The final sample consisted of 170 Ogden job orders and 102 Richfield job orders.

TABLE 1

CLAIMANT/NON-CLAIMANT MIX ON JOB ORDERS

Claimant/Non-Claimant Mix	Richfield	Ogden
Job Orders with claimant(s) referred	42 (41%)	44 (26%)
Job Orders w/out claimant(s) referred	60 (59%)	126 (74%)
Total Job Orders	102 (100%)	170 (100%)

The initial subject addressed was the extent of service to claimants. Table 1 shows that well over half of the job orders from both local offices had no claimants referred.

Of the total number of applicants referred on all job orders--Table 2, claimants comprised about two out of ten applicants from both local offices. Claimants accounted for about 10% of the total applicant file in Richfield and about 13% in Ogden. The state average was about 12%. This indicated that claimants were receiving their fair share of referrals on job orders.

TABLE 2

CLAIMANT/NON-CLAIMANT MIX ON REFERRALS AND HIRES

	Richfield		Ogden	
Claimants				
Referrals	97	(20% of applicants)	106	(19% of applicants)
Hires	8	(8% of referrals)	29	(27% of referrals)
Non-Claimants				
Referrals	396	(80% of applicants)	441	(81% of applicants)
Hires	42	(11% of referrals)	181	(41% of referrals)
Total				
Referrals	493	(100% of applicants)	547	(100% of applicants)
Hires	50	(10% of referrals)	210	(38% of referrals)

The referral-to-hire ratio for Richfield claimants (also Table 2) was low--only 8%. Richfield's referral-to-hire ratio for non-claimants was scarcely better at 11% (combined, it was 10%). The low ratios may reflect poor economic conditions in the Richfield labor market area.

The Ogden referral-to-hire ratio was considerably higher, 27% for claimants and 41% for non-claimants (combined, it was 38%). The higher referral-to-hire ratio for both claimants and non-claimants, as compared with Richfield, may also be a reflection of economic conditions (more favorable), but is, in any event, a credit to the Ogden local office ES staff.

For a different perspective, see Table 3. Hires from the Richfield orders were 16% claimant and 84% non-claimant. For Ogden, it was 14% claimant and 86% non-claimant. By noting both the hire and non-hire figures for claimants and non-claimants, it can be seen that the "efficiency" in getting claimants placed is similar to that of non-claimants for both offices.

TABLE 3

SUCCESS IN OBTAINING HIRES--CLAIMANTS AND NON-CLAIMANTS

	Richfield		Ogden	
Hires				
Claimants	8	(16%)	29	(14%)
Non-Claimants	42	(84%)	181	(86%)
Non-Hires				
Claimants	89	(20%)	74	(22%)
Non-Claimants	354	(80%)	260	(78%)

Many factors affect the level of service which ES provides to claimants, such as: economic growth, the unemployment rate, the season of the year, characteristics of the local office staff, local office management emphasis, and the ratio of claimants to non-claimants in the local-office applicant file. But in any case this study provides some measure of the claimant service level provided by a relatively typical small and large local office.

STUDY PHASE TWO - VERIFICATION OF REFERRALS

The second phase of the study was to assess the accuracy of the claimant information on UI and ES documents and printouts. Specifically, the job order, ARH, 511 and BEN were examined for accuracy, and also for communication between ES and UI. After this was accomplished, detailed telephone (and in some cases written) re-verification of referral results on the job orders was conducted by QC investigators. The results are presented below in three major categories: (1) the proportion of claimant referrals with QC-discovered problems-Table 4; (2) claimant referral problems, but not directly causing significant consequences (no measured cost to the Trust Fund, no lost adjudication decision credit, no lost hire credit)-Table 5; and (3) claimant referral problems of a more serious nature (having an actual or potential negative effect on the Trust Fund, ES hir credit or adjudication decision credit)-Table 6.

TABLE 4

PROBLEM/NO PROBLEM MIX ON REFERRAL RESULTS

	Richfield	Ogden
Claimants referred	110	106
Claimant referrals with no discovered problems	50 (45% of clmts referred)	35 (33% of clmts referred)
Claimant referrals with one or more problems	60 (55% of clmts referred)	71 (67% of clmts referred)

TABLE 5

MINOR* PROBLEM CATEGORY FINDINGS ON REFERRALS

Code	Description	Richfield	Ogden
(20)	Incorrect information on ARH	5	15
(25)&(26)	No clmt status on 511 when referred[a]	39	26
(31)	No clmt indicator on 514 due to deferral	11	9
(32)	No clmt indicator on 514--not deferred[b]	26	31
(42)	Hire rcrd'd on 514, no notation on UI rec-not mat.	1	19
(65)	Hire noted on UI record, no UI act.taken-not mat.	0	1
TOTAL		82	101

[a]Generally a 511P, deferred claimant, or new claim in system
[b]Included some clmnts not in current filing status at time of job referral

*Not having a direct effect on the trust fund, adjudication-decision credit or ES hire credit.

TABLE 6

MAJOR* PROBLEM CATEGORY FINDINGS ON REFERRALS

Code	Description	Richfield	Ogden
(41)	Hire recorded on 514 but not noted on UI record and benefits improperly paid, OP est. by QC[a,1]	0	5
(43)	Issue recorded on 514 but not noted on UI record, cleared by QC[2]	0	0
(44)	Issue recorded on 514 but not noted on UI record, disqualified by QC[1,2]	0	0
(51)	Incorrect results on 514, recorded as NH, H per QC[1,3]	1	4
(52)	Incorrect results on 514, recorded as H, NH per QC[4]	0	1
(53)	Incorrect results on 514, recorded as NH, issue per QC, benefits allowed[2]	3	21
(54)	Incorrect results on 514, recorded as NH, issue per QC, benefits denied[1,2]	1	5
(55)	Incorrect results on 514, recorded as H, HDNR per QC, benefits allowed[2,4]	1	1
(56)	Incorrect results on 514, recorded as H, HDNR per QC, benefits denied[1,2,4]	0	
(61)	Issue noted on UI records but not previously adjudicated, benefits denied by QC[1,2]	0	0
(62)	Issue noted on UI records but not previously adjudicated, benefits allowed by QC[1]	2	0
(63)	Issue noted on UI records but previous decision in error[5]	0	0
(64)	Hire noted on UI record but no prev action taken and benefits paid incorrectly[1]	0	0
	TOTAL	8	37

[a]In most cases were temporary jobs

[1]Actual or potential impact on the Trust Fund
[2]Lost adjudication decision credit
[3]Missed hire credit for ES
[4]False hire credit taken by ES
[5]Incorrect adjudication decision credit

*Having an actual or potential effect on the Trust Fund, adjudication-decision credit or ES-hire credit.

In Richfield there were few serious problems discovered from this special study. Problems were somewhat more numerous in Ogden. As a high volume, specialist-oriented office, Ogden's time limitations and specialization of job duties in either ES or UI may not lend themselves as readily to handling joint ES-UI matters.

Table 6 shows few or no errors following categories for both local offices: (43), (44), (52), (55), (56), (61), (62), (63), and (64). This is obviously to the credit of the Richfield and Ogden local offices. Considering all the claimant referrals involved in the study, one might have expected higher numbers in these error categories. This, happily, was not the case.

Problems Discovered Having a Cost Impact

A review of Table 6 shows that the problems of significant magnitude are in primarily one area--lost decision credit (codes 53 & 54), especially in the Ogden local office. A second area of concern, also in the Ogden office, was the problem of benefits improperly paid [categories (41), (51) and (54)]. This, of course, affects the Trust Fund monies expended.

These findings suggest that smaller local office operations, by their nature, are more inclined to have a more thorough verification process and a closer link between ES and UI. The staff from smaller local offices are also more likely to have job duties in both ES and UI functions. Perhaps this would support the practice of using "generalists" in local office operations. A generalist staff would also have a stake in the referral results of claimants.

Many applicants referred on job orders are claimants who are not in an active filing status or are deferred at the time of the referral. This is apparently by design of the Utah system. It is reflected on two documents: (1) the job order - there is no claimant indicator by the applicant's name; and (2) the 511 - it does not indicate claimant status. Work refusal issues from job orders on these claimants go undetected. Consequently, decision credit is missed. More importantly, improper payment of benefits could happen after reopenings. If the system were changed to indicate claimant status, a work refusal notation could be posted to the benefit record.

A greater concern to the Department may be the incomplete or inaccurate information recorded by local office staff when closing out job orders. Typically, hire credit is accurately obtained for those claimants (and presumably non-claimants) hired. The problem is that all the other claimants (and presumably non-claimants) referred are usually recorded just as "not hired". This is true, literally; however, sufficient inquiry is usually not made as to whether they properly applied,

refused a job offer, applied at all, or failed to report to work after being hired. As a consequence, non-monetary issues on claimants are being missed. This certainly loses the local office adjudication-decision credit. And, in those cases in which benefits should have been denied, it is a cost to the Trust Fund. Further, it does nothing to detect and thereby discourage violations of work refusal and possibly availability sections of UI law.

Another situation which occurred several times in the Ogden office was the delayed hire. An order would be closed showing the referred claimant as not having been hired. Later it would be determined that, in fact, he was hired. A new order would be written so that the hire credit could be obtained. The date of the hire would show up both on ES and UI transcripts as of the new job order date. Hire credit for claimants may be missed by this procedure if they are no longer claimants. Also, possible unreported benefit-year earnings could go undetected.

CONCLUSIONS

1. For the most part, the Ogden and especially the Richfield local office staff are reasonably accurate in recording information when claimants are referred on job orders.

2. The function most in need of attention in Ogden, and to a lesser degree in Richfield, is that of obtaining more complete information from employers when verifying referral results on claimants. This problem appears to have a significant impact on the adjudication-decision credit counts. It also may be a cost to the UI Trust Fund [in those cases in which 5(c) or possibly 4(c) denials would have been assessed had the issues been detected].

3. Claimants are referred on job openings reasonably often by each local office, considering their proportion of the total applicant file. There seems to be no evidence, however, that claimants are a concern of high priority to either local office staff. This may be because the referral-to-hire ratio for claimants was slightly lower than non-claimants in each local office. There may remain a lingering bias against claimants by some local office ES staff.

4. Ogden was more successful than Richfield in getting their referred applicants hired, whether claimant or non-claimant.

5. Staff in both local offices were conscientious in recording hire credit, and there were few cases of hire credit erroneously taken in either local office.

RECOMMENDATIONS

1. Remind local offices of their responsibilities. This would include instructing local office ES staff to obtain complete information on job order results for claimants. Both from this study's results and from discussions with ES personnel, it is apparent that this simply has not been a high priority, nor typically of great concern, to most local office ES staff. Their over-riding concern has been with the number of hires, the referral-to-hire ratio, ES programs, and employers. Some of the consequences of not being thorough on claimant referral results are missed issues and missed hire credit.

2. Provide ES/UI cross-training in Ogden. The goal would be to have the local office ES staff who works with job orders to become more knowledgeable and aware of the needs of UI, particularly in regard to job referrals and other ES services for claimants. It is possible that cross-training would be appropriate to other large local offices as well.

3. Indicate claimant status on the 511 and the job order until benefit exhaustion or the benefit-year-ending date, whether or not the claimant is in current filing status or is deferred. Hire and issue notations would then appear on the benefit transcript for resolution on deferred claimants and non-deferred claimants who later reopen. Also, possible unreported earnings could be detected. Finally, claimant-hire information for all claimants would be recorded for data tabulation.

   (It is recognized that recommendation #4 below is a sweeping one and may be considered beyond the scope of this study)

4. Raise the priority of providing ES services to claimants. Nationally, the Employment Service Division has, in recent years, become vulnerable, with its future existence called into question. Its role as a labor exchange is considered unnecessary by some powerful forces--a task perceived to be performed better and more appropriately by the private sector exclusively.

If ES were successful in placing far more claimants, its survival could be enhanced, possibly assured. This would require some restructuring of ES, with more priority toward the claimant population. This could include: (a) soliciting more high-paying job openings, (b) changing the approach of placement interviewers toward claimants, (c) providing incentives to claimants for using ES, and (d) having better detection and resolution of job refusal and availability issues. Perhaps Utah's ES Division could be a pilot state in such an effort.

The Congress requires that UI be paid through public employment offices [303(a)(2), Social Security Act], presumably so claimants would be exposed to a viable labor exchange. To the extent claimants are not so serviced, or their negative behaviors are not documented and dealt with, the necessity of ES as an adjunct to UI is weakened.

CH-039

COLORADO

QUALITY IMPROVEMENT PROGRAM

- FINAL REPORT -

==========

- MISREPORTED BASE PERIOD WAGES -

* FORM REVISION *

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August 1990

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Executive Summary

The study evaluated the benefits and effects of a revision to the quarterly wage-reporting form used by Colorado employers. Study results were positive, with significant differences in specific error-cause rates, a decrease in the case error rate and a decline in the total number of errors. Thus some of the data (percentages and numbers) showed meaningful improvements after the form revision. A number of these post-revision figures were statistically significant. In lieu of any other major changes pertaining to this area, the study concluded that the form revision had a positive, but indeterminable, impact on base period wage errors.

Introduction

The Colorado Quality Control (QC) unit initiated the Quality Improvement Program (QIP) in January, 1989. Eleven separate program improvement studies comprised the 1989 QIP project. Each study addressed one of the three major error causes detected by QC: work search, benefit year earnings and base period wages. QC results indicate that base period wage errors are the most frequent cause of error and affect more weeks than any other error cause. They therefore result in numerous improper payments. They have also been the primary cause of underpayments since the inception of the QC program in 1986. Wage errors will, by design, affect every week paid on a claim, so an enormous error potential exists in terms of weeks. For these reasons, two of the ten QIP studies performed in 1989 targeted this problematic area. This report presents and summarizes the results obtained from one of the two QIP studies that targeted base period wage errors.

Process & Results

The Department has a demonstratable, longstanding committment to high-quality service. This committment is evident in the program improvement efforts aimed at existing processes as well as in implementation of new programs that address client needs. QC investigation results, especially the error rates, evidence the need for some form of error reduction effort which targets base period wage errors. Wage errors have been the most frequent cause of error since 1986, resulting in numerous improper payments. They have had a dramatic, negative impact on the case error rate and remain the primary cause of underpayments. In addition, they involve more improperly paid weeks than any other error cause. Historically these errors have been relatively minor as far as dollars are concerned, but this situation is subject to change without notice. The area has great "error-potential" in terms of weeks, dollars and case errors. Any improvements in this area could result in tangible and intangible benefits.

The available options are somewhat limited, particularly given the wide variety of employers in the state and the different types of base period wage errors that can occur. The typical, basic concerns are cost, practicality and "coverage". That is, the error reduction methodology should address as many types of wage errors as possible at minimal cost. It should also be easy to implement. Ideally, it would be non-punitive and non-antagonistic in nature. Finally, the emphasis should be on error prevention instead of error detection.

The Department has certain procedures in-place which serve to detect, and correct, wage reporting errors. Most errors are discovered when the quarterly wage report is reviewed prior to data entry. A few of the minor errors can be corrected by a technician, but most require employer correction. In these cases the erroneous wage report is returned to the employer with a standard form which details the specific problem. The reason these errors occur could be poor form design, omission of information, inadequate instructions or employer misunderstanding of form requirements. The QC unit proposed a QIP study which would examine the quarterly wage reporting form. This examination included both format and instructions. The idea was to identify areas in need of revision, forward specific recommendations to appropriate staff and follow-up on these revisions to determine whether they had a positive effect. The form was already scheduled for revision so the QIP study was both timely and appropriate. The study was therefore designed to evaluate the potential benefits (i.e., error reduction) of the form revision.

A primary question was how to measure the "effects" the revision had on base period wage errors. That is, how to objectively determine the actual benefits of the form revision. In order to evaluate these effects the appropriate cases must first be identified. The targeted "errors" were quarterly reports which were returned to employers for

corrections. One of the U.I. Tax units maintains records of returned reports, including a copy of the form which specifies the specific problems. This form has 15 categories for reporting errors (i.e., error "cause"). This system allowed QIP staff to track the employer errors for a given time period. For comparison purposes a before (2/88) and after (2/89) quarter were selected (following standard research design). It was thought that data from a full quarter would be more useful, informative and reliable than data from a shorter time-frame. The same quarter of the year was used in order to minimize possible seasonal effects and other potential biases. This also allowed the first quarter following the form revision to pass, thereby minimizing problems due to lack of familiarity with the new form.

A related consideration regards what factors would be used by way of measurement. Rather than rely on any single factor to determine the success of the revision it was decided that several items would be reviewed. The "case error rate" would be reviewed for each quarter, using 90,000 as the average number of quarterly reports received each quarter. The actual number of reports received is not recorded by any source, but this figure is the best approximation available. Thus the usefulness of the statistic is moderated by this qualification. Additional factors subject to review include the actual number of wage reporting errors per quarter.

The percentage of errors according to error cause were also a critical consideration. This analysis could reveal whether specific problems were resolved by the form revision or perhaps not even addressed. It was thought that if the revision had a positive effect on a specific error cause there would be a statistically significant difference between the percentages for each quarter. A standard Z test, for the difference between two proportions, was utilized to determine statistical significance (at the .05 level).

In addition to these analyses a sample was "tracked" through the second quarter. The sample of 50 employers was randomly selected from the first quarter error group. The question here was whether these employers would make the same (or another) type of error on the wage report for the "after" quarter. Standard proportions tests were used to ensure that the sample was not biased in terms of employer size. There were eleven employer size categories. The random sample passed the proportions tests for ten of these eleven categories. This is probably as good as can be expected given the small sample size. In fact, a second random sample had been selected as a backup and it was even less representative than the first. The proportions criteria was the first quarter error group, as the intent was to make the sample representative of the error-prone employers.

A review of the wage reporting form revealed several problems. The Department was in the process of changing over to an optical scanning system, so the form was already scheduled for revision. A number of changes were integrated into this effort in an attempt to minimize wage reporting errors. Some of these changes were minor while others were more substantial. One major effort involved clarification of the instructions. The instructions were "bulleted" on the reverse side of

the form. This effort included detailed explanations of interest and penalities, emphasis on and explanation of "taxable wages", instructions regarding how to compute taxable wages and reminders to include the employer account number on every page and to record the social security numbers on the wage list.

Several potential issues were addressed by computer changes. A specific area was created for printing the date the form was mailed, as the actual mailing date was not printed on the older version. The "taxable wage base" figure is now computer printed instead of being pre-printed (since it could change before the supply of forms was exhausted, resulting in confusion). The form now reflects the current figure (even the same day it changes). The "seasonal" column was removed from the wage list since it has caused problems with incorrect employee identification (as seasonal or non-seasonal). Now, an employer does not have to identify an employee as being seasonal since it is done automatically by the computer (via two separate runs). The computer routine prints seasonal report forms separately and only seasonal employers receive the form.

The question of which quarter and months should be included on the report was addressed by changing "First Month, Second Month, Third Month" to the actual name of the month. This is also printed on the form by the computer and should resolve the somewhat confusing issue of which months are covered by the report. The location of the employers' tax rate figure was moved to a line where the employer must use it to calculate their quarterly taxes. This should serve to reduce confusion about which figure to use in the calculation, especially when the rate has changed. A telephone number for inquiries is now included on the form so it is easy to determine where to call for information. Finally, the return envelope was modified to include a reminder message. It asks, "Did you include your account number on your check? Is your payment enclosed? and Are all tax forms enclosed?". All of these changes have been implemented.

The study hypothesis was straightforward. If the form revision was successful, the statistics for the after quarter should be better (i.e., lower) than those for the before quarter (all other things being equal). There should be fewer errors, a lower case error rate, or a statistically significant difference in the percentages for specific error causes. This did, to some extent, occur. The more pertinent figures are itemized in the statistical synopsis below. The error cause percentages reflect only those figures which were statistically significant at the .05 level. Significant differences were found for five of the fifteen error cause categories and a sixth category ("improper format") just missed the cutoff value for a statistically significant increase. This issue of improper formatting is, in all likelihood, due to lack of familiarity.

* Statistical Synopsis *

	BEFORE	AFTER
CASE ERRORS		
TOTAL	1179	854
ERROR RATE	1.31%	0.95%
ERROR CAUSES		
MISSING WAGE LIST	51.91%	57.73%
TOTAL WAGES ON LIST VS. FORM DISAGREE	3.73%	0.00%
MISSING OR INCOMPLETE SSN's	31.98%	24.59%
INCORRECT OR MISSING EMPL. ACCOUNT NUMBER	1.10%	2.46%
"OTHER"	1.87%	3.63%

Some of the figures in the "after" column are better (lower) than the coresponding "before" figures. Some of the more interesting figures detailed above are: the decline in the number of case errors, the decrease in the case error rate and the reduction in the percentage of errors attributed to missing/incomplete social security numbers and to differences in total wage figures. Given the relatively equivalent workload for each quarter, the reduction in the number of errors (by 325) is a very positive result. This represents a statistically significant decrease (which is evident in the case error rate as well). In lieu of any other substantial changes, these figures alone suggest that the form revision was a success.

An examination of the five significant error cause percentages should prove informative. Three of these five involve increases in the figures for the after quarter. Two qualifications should be kept in mind - the significant decline in the number of errors after the form revision and the fact that the increases are only relatively meaningful. For example: the increase in the percentage with missing account numbers represents an actual increase of only <u>eight</u> instances (from 13 before to 21 after). These small numbers suggest caution.

The increase in the percentage assigned to the "other" category is associated with the increase in the percentage assigned to the "missing wage list" category. The majority of the "other" errors (for the after quarter) were cases where the box was checked and the technician wrote "Please complete the enclosed form". The enclosed form was a blank wage list. The increase in the percentage of errors classified as "other" is directly related to (and caused by) "missing wage list" problems. Thus the increase in the "other" category can not be considered significant in any meaningful way.

The missing wage list error is the most frequent of the fifteen error causes. This is the reason the envelope was modified to ask whether all forms were enclosed. The increase in percentage for the after quarter actually represents a decrease in number - from 612 before to 493 after. This does, however, represent a greater percentage of all error causes for the after quarter compared to the before quarter. Some of this increase may be attributed to the decline in other error causes, but it is evident that this remains a primary factor in wage reporting errors. Specific recommendations are presented in the summary section.

Two of the error cause percentages had statistically significant decreases for the after quarter. The total quarterly wages are recorded on the wage list and on the quarterly report form. When these two figures disagree and a simple solution cannot be found, the form must be returned to the employer for correction. This problem was nonexistant in the after quarter, with virtually no instances of wage differences. This is probably due to the overall revision; with more explicit instructions, more detailed explanations and computer printed taxable wage base, tax rate and months. In lieu of any other significant program change, this improvement must be attributed to the form revision.

The percentage of errors associated with missing or incomplete social security numbers (SSN) also showed a statistically significant decline in the after quarter. This was, in fact, the largest difference in percentages for all error causes (down by 7.39%). This too could be a result of the form revision. Part of the revision included a specific statement in the explanation/instruction section to be sure to record the SSN for every employee. The elimination of the seasonal column may also have helped by freeing up space on the wage list or making it look less cluttered. Overall the wage list is a "cleaner" version than previous ones, so this general improvement may have been a factor as well. Hence the reduction in this error cause percentage is, at least in part, due to these revisions.

To further evaluate the effectiveness of the form revision a sample of 50 error-group employers was randomly selected from the before quarter. This sample was proportional to the error-group from that quarter in terms of employer size (with but one exception - refer to previous discussion of study methodology). The wage reports for the after quarter were reviewed for these 50 employers. This review yielded another positive result, as not one of these 50 had a wage

reporting error in the "after" quarter. Although it must be granted that other factors may have contributed to this finding, the revision must have had some effect. The positive results thus imply that the form revision had a beneficial impact on wage reporting.

The individual statistics and results are inconclusive in themselves. However, a number of the post-revision results detailed in this report are indeed better. When considered in conjunction with one another, as a whole, these results suggest that the revision did in fact have a positive effect. Thus, in lieu of any other significant program changes dealing with this area, it is concluded that the form revision had a positive impact on base period wage errors. The precise nature and extent of this effect is not, strictly speaking, quantifiable. Nonetheless, the study results do support the conclusion that the form revision was a positive, worthwhile endeavor and helped to reduce wage reporting errors.

Summary

Base period wage errors involve a variety of complex problems. The questions are difficult and simple solutions do not always exist. The form revision appears to have had some success, but it is certainly not the final answer. Employers are more aware of wage reporting problems and are perhaps more careful when completing wage reports. The revised wage reporting form certainly helped to some degree. The form revision thus served as a small, but valuable, step in the right direction.

By way of suggestion, it may help to add another reminder to the return envelope regarding the wage list (especially since a missing wage list is the most common type of employer error). This could be a simple statement like: "Did you include your wage list?" Alternatively, add it to the existing statement so it reads: "Are all tax forms enclosed, including the wage list?". Periodic PR campaigns are another positive endeavor which may also address the wage reporting problem.

The Department may want to consider developing a video which explains how to complete the quarterly wage report. It could be oriented toward the "average" small employer, although it could apply to larger employers as well. Optionally, a second video for larger employers could be developed. The video could be "checked-out" from the local office for a specific time period at no cost to the employer. This could be quite positive in terms of customer service, especially since it creates a new and valuable resource for the employer community. Ultimately this could be one part of a larger video library covering a wide variety of employer-oriented topics. These could range from adjudication or appeals to delinquent reports. Some of the necessary resources already exist within the Department, so expenses could be minimized. Finally, the Department might consider an "employer assistance" telephone line. The employers could call this number for assistance when completing the quarterly wage report (or other tax-related forms).

In closing, this QIP study was another successful endeavor. The stated objectives were, for the most part, realized by the study. This study, combined with the other 1989 QIP studies, provides further evidence of the Department's committment to both program improvement and to a quality U.I. program.

CH-037

UI PROGRAM IMPROVEMENT SUMMARY

Source: Washington State, DOL Region X

Contact: Mary Jane Edmondson Tel. No. (206) 753-5441

Address: Employment Security Department
UI Quality Control Unit
Attn: Mary Jane Edmondson
Mail Stop: KG-11
Olympia, WA 98504-5311

A. Type of problem/error addressed. The UIQC Quality Improvement Program (QIP) reviewed Temporary Total Disability (TTD) claims. The TTD program provides unemployment insurance protection to workers who have not been reemployed after a prolonged period of temporary, total disability. This study was conducted because 10% of all waived overpayments are caused when TTD claims are paid simultaneously with time loss payments.

B. Action taken. The study reviewed TTD claims in more detail. It focused on the extent of simultaneous payments from a random sample of all active TTD claims.

C. Statistical results. The following is a summary of the study findings:

1) A random sample of 314 TTD claimants were reviewed. This represents 10% of the 3113 active TTD claims.
2) Seventy-five people received time-loss benefits after the effective date of the initial UI claim.
3) Forty-two people were covered by self-insured and self-administered time loss programs; thirty-three people were covered by state-insured and state-administered programs.
4) Of the seventy-five people receiving time loss benefits after the effective date of their initial UI claim, thirty-three did not receive UI benefits because their claim was cancelled.
5) Eighteen people received waiting period credit or an overpayment.
6) Of the eighteen claimants, eight received improper waiting period credit and ten were overpaid in the amount of $4,506.
7) The overpaid claimants represented 3.1% of the total sample.
8) Only one of the ten overpaid claimants was identified in the current system.

D. Recommendations. The study proposed four recommendations.

1) Establish a reciprocal agreement with the Department of Labor and Industries (L & I) to conduct a routine crossmatch.
2) When a person reopens the time loss claim, the application asks if he/she is receiving unemployment insurance. If the client indicates "yes," a copy of the application should be forwarded to our department so we can monitor the claimant for potential UI payments. This is another method that may reduce simultaneous payments.
3) Routinely review and document the claimant's availability and ability to work on all TTD claims. The only claimants in this study with documented availability statements were the ones with identified overpayments.
4) Add an indicator to the On-Line Benefit Network to indicate the type of TTD time loss payment received, i.e., state-insured or self-insured. When the crossmatch is run, this would ensure that the claimant information would be submitted to the appropriate L & I pay system and reduce our cost/time in the crossmatch process.

E. Results.

The results of this study are, as yet, undecided.

CH-038

UI PROGRAM IMPROVEMENT SUMMARY

Source: Washington State, DOL Region X

Contact: Mary Jane Edmondson Tel. No. (206)753-5441

Address: Employment Security Department
UI Quality Control Unit
Attn: Mary Jane Edmondson
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Olympia, WA 98504-5311

A. Type of problem/error addressed. The UIQC Quality Improvement Program (QIP) reviewed Benefit Payment Control (BPC) reports for 1988 and determined a substantial number of errors and dollars overpaid that were also waived due to improperly deducted pensions.

The BPC reports show that 2% of the total dollars overpaid for fourth calendar quarter 1988 were overpaid to claimants due to improperly deducted pensions. Fifty-seven percent (57%) of the pension overpayments were waived.

B. Action taken. All of the waived, pension overpayment determinations that were issued during fourth quarter 1988 were reviewed by QIP staff. Seventy-four (74) claimants were reviewed. A comparison sample was drawn from the Combined Wage and Benefit History (CWBH) file for calendar year 1988. A ten percent (10%) sample was selected of the claimants sixty-two (62) years of age or older. Out of the twenty-six (26) claimants selected, sixteen (16) had a deductible pension.

The goal of this QIP study was to determine why these people were improperly paid and establish procedures that would reduce these mispayments.

C. Statistical results. The following is a summary of the findings from the BPC report:

1) On an annual basis, the dollars of overpayments resulting from this sample are $133,960.00.
2) More than 70% of the claimants answered "no" to the pension question on the Initial Application form.
3) Some of the claimants had multiple pensions.
4) The pension types are as follows:
   a. Social Security - 58%
   b. Government pensions - 23%
   c. Other types - 23%
5) The issues could have been detected at the following major process levels:
   a. Initial claim - 58%
   b. Continued claim - 36%
   c. Re-open - 5%

The CWBH sample resulted in the following findings:

1) Pensions correctly reported in the system - 62%
2) Total number of Social Security pensions - 50%
3) Number with identified overpayments - 15%

A summary of the findings identified in both samples is as follows:

1) The date of birth is frequently keyed incorrectly from the Initial Application or 1B-1, Interstate Application for Benefits.
2) Availability issues and wage restrictions are not addressed at the initial application level.
3) Social Security pensions cause the most errors, followed by government pensions. Social Security pensions create large overpayments.
4) There is an inconsistency between local offices in the application of the fault provision.
5) The Initial Application form has no room for reporting multiple pensions.
6) The Social Security Administration discourages claimants from back-dating their application for OASI benefits because their monthly amount is substantially reduced. The Social Security Administration also reported the dollar limitations an individual can earn while receiving full OASI benefits.
7) Fact-finding statements do not indicate the type of Social Security benefits received. The facts that accompany a disability pension determination do not support a disability pension.
8) In many instances, there were no letters of award on file to support the dollar amount of the pension.
9) The claimant's availability was seldom addressed in the back-up documentation. Reasoning statements in the determination were missing or not understandable.
10) Out-dated determination formats are still in use.

D. Recommendations. This QIP study proposed ten recommendations to improve quality in claims with pensions, and to reduce the number of waived and assessed overpayments.

1) Conduct an exploratory crossmatch procedure between the Employment Security Department and the Social Security Administration to determine whether or not a routine crossmatch would provide early detection of pensions. Preliminary information has been gathered to assist in determining the required elements to conduct a crossmatch and establish whether or not this procedure effectively detects unreported pensions.
2) If the crossmatch is successful and is a cost-effective measure in reducing overpayments, a routine quarterly match should be conducted. JSCs would be responsible for resolving pension issues.
3) Generate a message to the claimant that would be mailed when the claimant approaches age sixty-two (62). The message should read, "Have you applied for or are you receiving Social Security benefits or a pension? Certain pensions are considered deductible income from your unemployment insurance. It is your responsibility to report this information to your local Job Service Center when you apply for either Social Security benefits or for a pension."
4) Add one additional line to the pension question on the Initial Application for Benefits, EMS 5327-511. This would allow the claimant to enter more than one pension. Attachment G-1 and G-2 are copies of the current Initial Application forms.
5) A completed statement on availability and pension type should be taken on every claimant who indicates that he/she has applied for, or is receiving a pension. This information should be taken at the initial claim and reviewed for change at the re-open stage. The availability statement should include facts relating to potential work restrictions based on the annual wage established by the Social Security Administration.
6) Early detection of potential issues would be facilitated on the initial claim if the questions the claimant answers are located on the form directly across from the codes/indicators used by the representative who completed the form for data entry.
7) Pension training should be given, in-depth, at either the initial claim or the nonmonetary training sessions. Neither training currently covers this issue thoroughly.

8) Generate a yearly circular to the JSCs advising them of the new dollar amount Social Security Administration allows the recipient to earn without dollar loss to their benefits. The JSCs should contact the claimant to see if he/she places any barriers or restrictions to employment.
9) Adjustment staff should review the fault procedures. A procedure should be implemented to routinely review the application of fault by adjustment staff to establish consistency in statements.
10) Once a Social Security pension has been established on a claim, an automatic indicator should be reported to the JSCs when the subsequent Initial Application is filed. The indicator could appear on the EMS 5330, Monetary Determination "greenbar."

E. Results.

1) Numerous meetings have occurred between UI technical staff, field office and QIP staff to review and plan implementation of these recommendations.
2) Recommendations #4, 5, 7, 8, 9, and 10 were accepted.
3) One additional recommendation was proposed and accepted. That recommendation is that field staff use current formats when writing pension determinations.
4) Recommendations #1 and 2 were well received but not accepted because proposed legislation for the 1991 legislature may render this recommendation unnecessary.
5) Recommendation #3 is on hold until we receive a legal opinion as to whether or not this can be done without discrimination.
6) Recommendation #6 was also well received but placed on hold. The group felt that other recommendations would improve the errors and perhaps this one would not be necessary.

Attachment